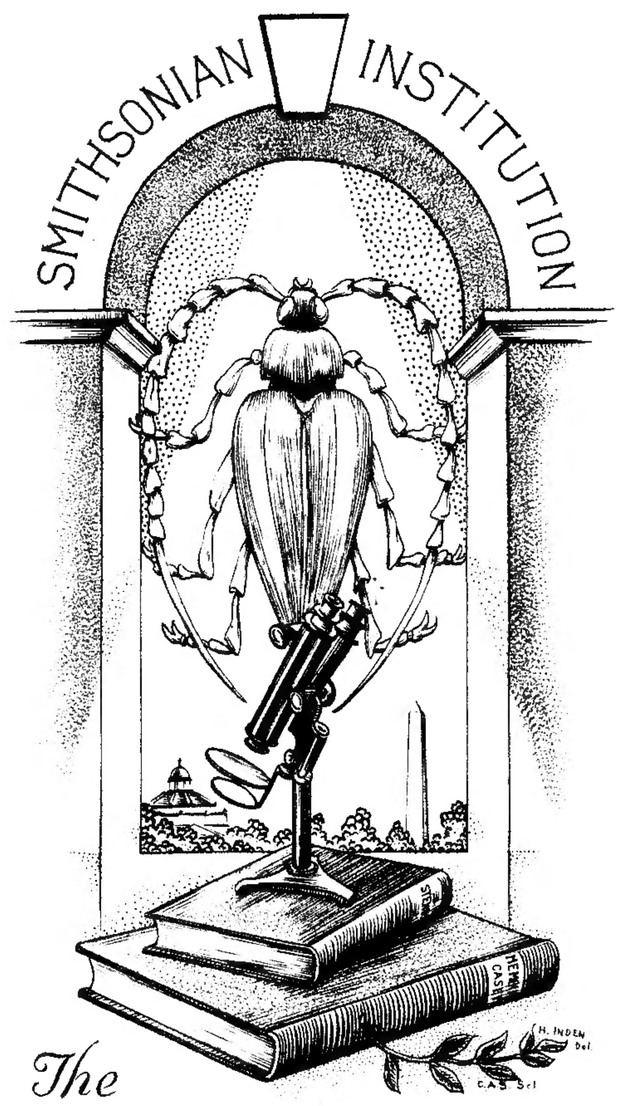

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BIOLOGIA CENTRALI-AMERICANA.

INSECTA.

COLEOPTERA. Vol. V.

LONGICORNIA

BY

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BRUCHIDES

BY

DAVID SHARP, M.B.

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INTRODUCTION.

THE Tribe Longicornia, which occupies nearly the whole of the present volume *, is equivalent to the family Cerambycidæ of most modern entomologists, and is one of the largest of the seventy-two groups into which MM. Lacordaire and Chapuis divided the Coleoptera, in their great work on the order brought to a completion in 1876. Compared with the Tribe Geodephaga, it is beyond doubt far more numerously represented in tropical than in extra-tropical lands, and its species and genera are naturally multiplied to the highest degree in tropical forests, where woody vegetable growths, to which the Longicornia are almost exclusively attached in their larval states, are most numerous and varied. Although their beauty of form and colours has led to their having been industriously collected, it is evident, from the number of new species continually arriving from countries supposed to be fairly well explored, that we are yet far from possessing even an approximately complete knowledge of the whole product of Nature in this department. This is partly due to the recondite and, to a great extent, nocturnal habits of a vast proportion of the species, and the difficulty of the search for them in dense primæval forests where few clearings offer the necessary openings.

The total number of species described down to 1883, the date of M. Lameere's Supplement to the Munich Catalogue, amounted to 8968. In the following pages 1273 species are enumerated or described from the region embraced in the present work, a number which is probably not more than a third of the total inhabiting Tropical America, even allowing for the generally-distributed species, which form but a small proportion of the Longicorn fauna in any one extensive section of the area. It is probable that an equal number exists in Tropical Asia and in Tropical Africa. In the Malay Archipelago, Mr. Wallace collected 1046 species, a number which has since been considerably increased by subsequent explorers. In the Amazons valley I

* The general remarks on the Tribe Bruchides, which occupy the remainder of the volume, are given by Dr. Sharp at p. 437.

collected myself 679, a total which will be much augmented when the dense and lofty forests are partially cleared. Temperate North America must at present number about 700 described species, Crotch in his "Check List," published in 1874, having recorded 580, and a great number having since been added. Europe, including Russian Asia, as I gather from Ganglbauer's "Bestimmungs-Tabellen" (1884), yields 644 species.

With regard to the relations of the Longicorn fauna of our province to those of adjoining regions of America and other parts of the world, a comparison of the genera with which, in the present imperfect state of our knowledge of the distribution of species, we have to be content, gives similar results to those pointed out with regard to the Geodephaga, in the Introduction to the first volume of the Coleoptera of the present work. It proves even a stronger endemicity in the American, and especially the Tropical American, Longicorn fauna, than was shown in the case of the Geodephaga. The vast majority of the genera, 304 out of a total of 330, are seen to be exclusively American; 246, or more than two thirds, exclusively Neotropical; and 97 exclusively Central-American. The number of genera common to Central and Temperate North America is 84, which are composed of the following elements, viz.:—7 genera widely distributed both in the Western and Eastern Hemispheres; 16 North-temperate genera occurring in both Hemispheres; 32 American genera of pretty general distribution north and south, and 29 genera peculiar and common to North and Central America. The North-temperate genera occurring in the Central-American fauna (none of which passes into South America), viz. 16 out of 330, are thus seen to be relatively much fewer than in the Geodephaga, where the proportion is 16 to 154. The range southward into our region of these North-temperate forms is further extremely restricted, for out of the 16, no fewer than 14 stop short at Mexico, and the two found further south, viz. *Leptura* in Guatemala, and *Pachyta* in Costa Rica, are there represented only by very aberrant species.

The 29 genera common and peculiar to Temperate North America and Central America form an interesting feature in the fauna, few of them ranging widely beyond its northern limits. About half of them (15) have close Tropical American affinities, the other half (14) may be classed as Nearctic forms. Adding these 14 to the 16 North-temperate (Nearctic and Palæarctic) genera, we have 30 northern generic forms of Longicornia in the Central-American fauna which do not extend into South America; out of the 30, 27 stop short at Mexico, 2 reach no further south than Guatemala, and the 30th is an aberrant form isolated in Costa Rica. A similar result is shown if we trace the dispersion southward of the whole of what we may term the more northerly forms inhabiting Mexico, *i. e.* adding the exclusively Mexican to the

North-temperate genera, which together made a total of 93. Of these, 74 are confined to Mexico and Guatemala, and only 5 reach Panama. The essentially Neotropical forms from South America do not drop off in their range northward in a proportion at all similar to this; for of 137 South-American genera inhabiting the region (excluding those of wider distribution) no fewer than 71 reach Mexico and do not pass beyond; 16 others reach Guatemala only, and only 50 stop short at Nicaragua.

From this analysis I venture to think that the main conclusions arrived at on a similar examination of the Geodephaga are confirmed, viz.:—1, that the Central-American fauna is essentially Neotropical; 2, that the northern portion of the region (Mexico and Guatemala) is not an extension southward of the Neartic Province, but, 3, that it is a remarkably distinct subprovince of the Neotropical fauna.

The species here enumerated as inhabiting our region consist of:—Prionidæ 60, Cerambycidæ 531, Lamiidæ 682, making a total of 1273 species; of this number more than half are described as new, viz. Prionidæ 22, Cerambycidæ 245, Lamiidæ 375, making a total of 642 new species.

The total number of genera is 330; of this number 57 are described as new:—Prionidæ 0, Cerambycidæ 16, Lamiidæ 41. 493 species are figured on 25 plates. 27 distinct species are noticed as sp. ——?, but not described, owing to want of sufficient material.

Mr. Champion paid a great deal of attention to these insects, both in Guatemala and in the State of Panama; he obtained altogether about 600 species. The late Mr. Belt met with 300 species in Nicaragua, chiefly in the limited district of Chontales.

H. W. B.

January 1886.

ERRATA ET CORRIGENDA.

Page	Line	
10	16	*for* Vegas *read* Vigas
27	several places	*for* **Peribæum** *read* **Peribœum**
33	13	*after* Entom. *add* 1840.
39	37	for *C.* read *O.*
41	2	*for* 161 *read* 160
41	4	*for* 9 *read* 161
61	8	*for* **Listoptera** *read* **Listroptera**
70	30	for *quadrinotum* read *quadrinotatum*
84	16	*for* 6000 *read* 1000
93	35	for *C.* read *M.*
108	22	*for* Chinantla *read* Chinautla
145	26	*add* (Tab. XIV. fig. 2.)
147	26	*for* 8 *read* 18
155	15	for *Leipus* read *Leiopus*
164	5	for *L.* read *A.*
175	8	*for* Zumbador *read* Tumbador
182	21	
193	34	
194	28	
195	26	*for* Pancina *read* Panima
197	14	*for* Honda *read* Hondo
199	29	*for* 1873 *read* 1874
201	36	*for* Puenta *read* Puente
213	27, 35	*for* Castlenau *read* Castelnau
218	10	for *Hoppfner* read *Höpfne*
252	24	*for* viii *read* xviii
263	6	*before* **Ibidion** *add* 1(G).
271	18	*for* 6, 7 *read* 16, 17
301	21	*for* **angusti** *read* **augusti**
307	23	*for* 60 *read* 61
385	18	*for* 148 *read* 149
395	32	*for* 5 *read* 4
396	1	*for* 6 *read* 5
432	26	for *cinctipennis* read *cinctiventris*

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¶ *Lepturges calligramma* on the Plate.
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* *Amphionycha cinctiventris* on the Plate.

BIOLOGIA CENTRALI-AMERICANA.

ZOOLOGIA.

Class INSECTA.

Order COLEOPTERA.

Tribe LONGICORNIA.

Fam. PRIONIDÆ.

Subfam. *PRIONINÆ.*

In this subfamily are included the whole of Legions I. & II., and of the latter Cohortes I. & II. of Lacordaire's system, resting the definition of the combined subdivisions chiefly on the character of coarsely-faceted eyes. The highly artificial separation of diverse abnormal forms as a "Legion" equivalent to a natural group of the same rank, as proposed by Lacordaire, is here avoided. The character of coarsely-faceted eyes, in *Prionidæ* as in other subfamilies of Longicornia, seems very generally associated with nocturnal habits and sombre colours.

PARANDRA.

Parandra, Latreille, Gen. Crust. et Ins. iii. p. 28 (1802).

Thirty-five species of this aberrant Longicorn genus were recorded in the Munich Catalogue (Catalogus Coleopterorum, auctoribus Dr. Gemminger et B. de Harold) in 1873; but many of these have since been shown to be slight varieties or synonyms. The general form (or facies), colour, and sculpture are remarkably similar in all; and unless close attention is paid to the dentition of the mandibles in the males and the accessories of the tarsal claw-joint, it is impossible to distinguish them with accuracy. Some twenty distinct species, however, are known; and their distribution is remarkable: America (Tropical and North) is their metropolis, Western Tropical Africa, the Cape of Good Hope, the Moluccas, and New Caledonia having each one or two species; and one isolated member is found on the borders of the Caspian.

1. **Parandra glabra.**

Attelabus glaber, Degeer, Mém. iv. p. 351, t. 19. f. 14–16 (1774).
Parandra glabra, Gyll. Syn. Ins. App. i. p. 145 (♀).
Parandra mandibularis, Perty, Del. Anim. Art. p. 84, t. 17. f. 1 (1830).
Parandra barbata, Thoms. Mus. Scientif. p. 95 (1860).
Parandra grandis, Thoms. Mus. Scientif. p. 79 (1860).

Hab. NICARAGUA, Chontales (*Belt, Janson*); COSTA RICA, Volcan de Irazu (*Rogers*).—COLOMBIA; VENEZUELA; ECUADOR; SOUTH BRAZIL to Rio Janeiro.

I have compared numerous Central-American examples of this largest of the *Parandræ* with others from Ecuador, Venezuela, and South Brazil, without finding any difference of specific value amongst them. Slight differences in strength of punctuation occur; but in the more essential characters of the form and dentition of the mandibles, and in the outline of the thorax and front edge of the clypeus, all agree closely.

2. **Parandra polita.** (Tab. I. fig. 3.)

Parandra polita, Say, Journ. Bost. Soc. N. H. i. p. 192 (1835)[1].
Parandra cylindrica, Thoms. Mus. Scientif. p. 82 (1860).

Hab. NORTH AMERICA, Indiana[1].—MEXICO (*Sallé*); GUATEMALA, Zapote (*Champion*).

The figure is taken from a well-developed male, with very dark-coloured head, from Mexico.

Dr. Horn, of Philadelphia, first pointed out the identity of Say's species with the well-known *cylindrica* (so called, although a linear and *flat* insect).

3. **Parandra scaritoides.**

Parandra scaritoïdes, Thoms. Mus. Scientif. p. 82.

Hab. NICARAGUA, Chontales (*Belt*, 1 ♀).—SOUTH AMERICA, Carthagena.

Very closely allied to *P. polita*, differing chiefly in the more projecting and acute angles of the orbit of the eyes in the ♂, and by the more conspicuous punctuation of the surface. The insect is also relatively broader.

4. **Parandra angulicollis.**

Modice elongata, rufo-ferruginea, passim fortiter (subtus minus crebre) punctata; antennis thoracis basin attingentibus, articulo 3^io^ subgloboso, 4^o^–10^m^ subquadratis; thorace quadrato, ante basin sinuatim fortiter angustato, angulis omnibus productis acutis; tarsi paronychio unico.
Long. 9–10½ lin. ♂ ♀.

Parandra punctata, Bates, Trans. Ent. Soc. 1872, p. 166 (nec *punctata,* White).

♂ mandibulæ dentibus tribus apicalibus, supra longitudinaliter fortiter concavæ. ♂ minoris mandibulæ breviores, minus arcuatæ, dentibus distantioribus, primo lato apice sinuato. Epistoma medio producto-lobatum, lobo quadrato, apice sinuato. Thorax valde transversus, apud angulos anticos acutos latissimus.
♀ mandibulæ parvæ. Epistoma medio angulato-productum. Thorax quoad formam variabilis, plerumque minus transversus, angulis anticis minus productis.

Hab. GUATEMALA, Zapote, Capetillo (*Champion*); BRITISH HONDURAS, R. Sarstoon (*Blancaneau*); NICARAGUA, Chontales (*Belt*, *Janson*).

Having recently examined the type of White's *P. punctata* in the British Museum, I find it different from the Chontales species. It is a female, with, for this genus, remarkably long antennæ. The present species is allied to *P. lævis* (Latr.) of Cuba and St. Domingo, agreeing with that pretty well in general form, but differing at once in the position of the first, or lowest, tooth of the mandibles in well-developed males, this tooth in *P. lævis* being situated far below the other two (which are close together and terminal), and in *P. angulicollis* close to the terminal teeth.

The thorax in the male and the majority of the females in *P. angulicollis* is remarkably broad and short, uniformly and strongly punctured, and with prominent, acute angles; a little before the posterior margin it is somewhat strongly narrowed, in a curved line. The anterior angles in the male project further than they do in *P. lævis*.

P. angulicollis belongs to a group of closely-allied species which appears to be numerous in Tropical America, and which is distinguished by the quadrate and strong median lobe of the epistome and the single paronychium to the tarsal claw-joint.

ERICHSONIA.

Erichsonia, Westw. Trans. Ent. Soc. v. p. 210 (1849).

One of the principal characters on which Lacordaire relied for separating this curious little Prionid from *Parandra*, viz. the absence of paronychia, proves to be untenable, since true *Parandræ* exist in which there are no paronychia.

1. **Erichsonia dentifrons.**

Erichsonia dentifrons, Westw. loc. cit. p. 211, t. 22. f. 2[1]; Lacordaire, Gen. Col. Atlas, t. 81. f. 5.

Hab. MEXICO[1]; BRITISH HONDURAS, R. Sarstoon (*Blancaneau*).

PSALIDOGNATHUS.

Psalidognathus, G. R. Gray, Griff. An. K. ii. p. 115 (1832).

This fine genus is peculiar to the Andean region of Tropical America, the forest region east of La Paz being apparently its southern limit. A species of East Peru (*P. limenius*) descends a little way into the plains of the Upper Amazons; but the genus does not occur in Guiana or Brazil. We have now to record for the first time the occurrence of a species in Central America*.

1. **Psalidognathus modestus.**

Psalidognathus modestus, Fries, Kongl. Vetensk. Acad. Handl. 1833, p. 327, t. 9. f. 1–3?

* The locality "Panama" for *P. boucardi* and *P. batesi*, supplied to M. Thomson (Typi Cerambycid. pp. 7 & 10), is probably incorrect. I have seen numbers of the first-named from the neighbourhood of Medellin, in the Cauca valley.

Hab. Costa Rica, Volcan de Irazu (*Rogers*).—Ecuador.

A pair (♂ ♀) taken by Rogers on the Volcano of Irazu, in Costa Rica, agree closely with specimens received from Loja, in Ecuador, which I refer to *P. modestus*, Fries, but with much doubt, as the description is not quite satisfactory.

PITHOCLES.

Pithocles, Thoms. Syst. Ceramb. p. 292.

Contains one species only, peculiar to Mexico. The genus is very closely allied to the following, differing chiefly in the flattened antennal joints of the male.

1. **Pithocles procerus.**

Pithocles procerus, Thoms. Syst. Ceramb. p. 292.

Hab. Mexico (*Sallé*).

DEROBRACHUS.

Derobrachus, Serv. Ann. Soc. Ent. Fr. 1832, p. 154.
Braderochus (Buq.), Lacord. Genera des Col. viii. p. 74.

This genus is well represented in Central America, and may be cited as one of the characteristic forms of the region. Two species only are foreign—one (*D. brevicollis*) found in the South-eastern States of North America, and the other (*D. agyleus*) in "Colombia."

1. **Derobrachus longicornis.** (Tab. I. fig. 9.)

Braderochus longicornis, Bates, Tr. Ent. Soc. 1869, p. 166.

Hab. Nicaragua, Chontales (*Belt*).

2. **Derobrachus inæqualis.**

Derobrachus inæqualis, Bates, Tr. Ent. Soc. 1869, p. 167, note.

Hab. Guatemala.

3. **Derobrachus asperatus.** (Tab. I. fig. 4 ♂, fig. 5 ♀.)

Derobrachus asperatus, Bates, Entom. Monthly Mag. xiv. p. 274 (1878).

Elongato-oblongus, supra omnino intricato-punctatus, nitidus, niger, elytris maris interdum castaneis; thorace utrinque æqualiter trispinoso; elytris nullo modo costatis, apice ad suturam spinosis; antennis ♂ corpore paullulum brevioribus, articulis 1°–3^{m} asperato-punctatis, 3° supra sulcato, 4°–5^{m} lateribus, 6°–11^{m} omnino subtiliter acute strigosis; pedibus asperato-granulatis et punctatis; corpore subtus lævi, pectore lateribus punctatis et fulvo-pilosis.

Long. ♂ 1 poll. 9 lin., ♀ 2 poll. 3 lin.

Hab. Costa Rica, Volcan de Irazu (*Rogers*).

4. **Derobrachus apterus.**

♀ apterus; elongato-oblongus, nigro-piceus, nitidus, palpis fulvis; capite grosse scabroso; thorace minus transverso, nigro-polito, grosse sed haud crebre scabroso, lateribus utrinque 4-spinosis, 2 anticis conjunctis;

elytris passim crebre subvermiculatim rugosis, apice muticis apud suturam dehiscentibus; corpore subtus pedibusque lævigatis; metasterno abbreviato, pedibusque 4 posticis paullo approximatis.

Long. 2 poll. 2 lin. ♀.

Hab. GUATEMALA (*Boucard*).

A species remarkable for the abbreviation of the metasternum and the consequent approximation of the middle and hind legs—a character which, taken together with the apterous condition of the females, reveals an affinity with *Psalidognathus*. In all essential points, however, the species agrees with *Derobrachus*. The male is at present unknown.

MACRODONTIA.

Macrodontia, Serv. Ann. Soc. Ent. Fr. 1832, p. 139.

Six species of this genus have been described from South America, one of which, the well-known *M. cervicornis*, has a wide range, from Rio Janeiro to the Upper Amazons, the others being local. The following is the only one hitherto known to occur beyond the Isthmus of Panama.

1. **Macrodontia dejeani.** (Tab. I. fig. 6, ♂.)

Macrodontia dejeanii, Gory, Ann. Soc. Ent. Fr. 1839, p. 127, t. 9.

Hab. NICARAGUA, Chontales (*Belt*).—COLOMBIA.

The figure is from a Chontales specimen.

CALLIPOGON.

Callipogon, Serv. Ann. Soc. Ent. Fr. 1832, p. 140.

A genus of narrow range, extending from the tierra caliente of Mexico to Colombia. Three species only are known.

1. **Callipogon barbatum.**

Prionus barbatus, Fabr. Sp. Ins. i. p. 208; Oliv. Ent. iv. 66, p. 15, t. 10. f. 40.

Hab. NICARAGUA, Chontales (*Belt*, *Janson*).

The figure of Olivier, representing a male, and drawn from Fabricius's type specimen, justifies us in considering the original description to refer to the Central-American form, and not to the Mexican, to which it has been since applied, the two forms being quite distinct enough to be regarded as species. This is evident on comparing males of equal development, the Mexican species having mandibles twice the length of those of the Nicaraguan species, and antennæ also relatively much longer. In Nicaragua the following interesting variety occurs, apparently frequently, and in company with the type.

Var. **ornatum.** (Tab. I. fig. 8.)

A typo differt elytris utrinque macula rotundata medio-basali et vitta lata postice attenuata cano-pubescentibus.

The whitish spot and stripe of the elytra are formed of distinct and separate short hairs, and not *felted* as in *C. lemoinei*, although their position is the same as in that distinct species.

2. **Callipogon senex.**

Callipogon senex, Dupont, Mag. Zool. 1832, Cl. ix. t. 33[1].
Callipogon barbatum, Casteln. Hist. Nat. Ins. Col. ii. t. 29. f. 1[2].
Callipogon lucanicerus (Chevr.), Serv. Ann. Soc. Ent. Fr. 1832, p. 142[3].

Hab. Mexico, Orizaba[3].

M. Dupont, in the text accompanying the figure above cited[1], gives his reasons for considering the present species distinct from that figured by Olivier as *C. barbatum*, but seems not to recognize the important fact of the different habitat of the two forms. The large males were named by Chevrolat *C. lucanicerus*, but not formally described[3].

3. **Callipogon lemoinei.**

Callipogon lemoinei, Reiche, Rev. Zool. 1840, p. 275; Mag. Zool. 1842, Ins. t. 98.

Hab. Panama, Chiriqui (*Ribbe*).—Colombia.

STRONGYLASPIS.

Strongylaspis, Thoms. Class. Long. p. 313 (1860).

This small Central-American genus is distinguished from the Old-World *Macrotoma* solely by the tumid and roughened scutellum and the strongly arcuated prosternal process—characters that can only be considered specific, inasmuch as they are variable in the Old-World genus. The genus might therefore very well be united to *Macrotoma*. It is remarkable as being the only form at all nearly related to that well-marked type of Prionidæ occurring on the American continent. *Macrotoma* is distributed over the warm parts of Africa and Asia, the Mediterranean region, and the islands of the Indian Ocean and Malayan region. M. Thomson has recently described a *Strongylaspis* from Guiana; and M. Chevrolat records the genus from Cuba.

1. **Strongylaspis scobinatus.** (Tab. I. fig. 7, ♀; Tab. II. fig. 9, ♂.)

Strongylaspis scobinatus, Thoms. Class. Long. p. 313[1]; Chevrolat, Ann. Soc. Ent. Fr. 1862, p. 272[2].

Hab. Mexico[1]; Nicaragua, Chontales (*Belt*, *Janson*).—Cuba[2].

The figures are from Chontales examples.

2. **Strongylaspis bullatus.** (Tab. II. fig. 10.)

Strongylaspis bullatus, Bates, Tr. Ent. Soc. 1872, p. 167.

Hab. Nicaragua, Chontales (*Belt*).

MALLODONOPSIS.

Mallodonopsis, Thoms. Class. Long. p. 317.

This small group is generically distinct from other described American forms, except *Mallodonoplus* and *Aplagiognathus*, from which it is difficult to distinguish it by characters of more than specific value. It contains, like its allies, a limited number of species, confined to North and Central America and the northern parts of South America. Its affinities seem to be towards genera of the Old World, such as the Australian *Eurynassa*, rather than towards *Mallodon*, with the American species of which it is nevertheless liable to be confounded. The length and slenderness of the antennal scape which distinguish the type species (*M. mexicanus*) are not retained in species closely allied to it.

1. **Mallodonopsis mexicanus.** (Tab. I. fig. 1, ♂; fig. 2, ♀.)

Mallodonopis mexicanus, Thoms. Class. Long. p. 317.

Hab. Mexico (*Boucard*); Nicaragua, Chontales (*Belt*).

The figures are from Chontales specimens.

2. **Mallodonopsis corrosus.**

Elongatus, angustus, nigro-piceus; antennis (scapo excepto), palpis et tarsis rufo-piceis; capite, mandibulis thoracisque lateribus utroque sexu grosse et crebre scabrosis; ♂ scapo, femoribus tibiisque quatuor anticis etiam scabroso-punctatis, ♀ fere lævibus; thorace disco antice et postice subelevato fere lævi, lateribus denticulis acutissimis 8–10; elytris parallelis, punctulatis, utrinque vage trisulcatis, apice suturali spinoso. Long. 1 poll. 2 lin. usque 1 poll. 6 lin. ♂ ♀.

Hab. Guatemala (*Salvin*), Capetillo (*Champion*); British Honduras, R. Sarstoon (*Blancaneau*).

Distinguished by its narrow convex form, in which it resembles *Aplagiognathus spinosus* more than it does its congener *M. mexicanus*. It forms, indeed, a connecting link between the two genera, the scape being much shorter than in *Mallodonopsis*, though retaining the same curved and compressed shape and thus differing from the short, thick, clavate form of the same joint in *Aplagiognathus*.

APLAGIOGNATHUS.

Aplagiognathus, Thoms. Class. Long. p. 320.

Mallodon (partim), Lac. Gen. des Col. viii. p. 125.

Cnemoplites (partim), Newman, Charlesw. Mag. Nat. Hist. iv. p. 194.

A. spinosus (Newm.) is cited by M. Thomson as the type of his genus *Aplagiognathus*, which cannot be reunited to *Mallodon*, as Lacordaire attempted, without rendering the definition of the latter impracticable. In his later work, 'Physis' (vol. i. p. 90), M. Thomson enumerates eight species (besides two doubtful) as belonging to his genus, all Central- and North-American. Newman referred the type species to the Australian genus *Cnemoplites*, with which it has only a distant connexion.

1. **Aplagiognathus spinosus.**

Cnemoplites spinosus, Newman, Charlesw. Mag. N. H. iv. p. 194.

Aplagiognathus spinosus, Thoms. Class. Long. p. 320; Physis, i. p. 90.

Hab. MEXICO, near the capital (*Flohr*).

2. **Aplagiognathus hybostoma.**

♂ *A. spinoso* proxime affinis, sed differt mandibularum tubere altiore et lateraliter compresso. Paullo minor, oblongo-linearis, castaneo-fuscus, capite et mandibulis rufo-hirtis, his intus acute tridentatis, dentibus 1–2 medianis contiguis; thorace creberrime punctulato, plagis tribus discoidalibus lineisque brevibus exterioribus lævibus sparsim grosse punctatis; lateribus fere ut in *A. spinoso* acute multispinosis; elytris coriaceis et punctulatis, vage sulcatis, apice singulatim fortiter rotundatis, ad suturam breviter spinosis.

Long. 1 poll. 6 lin. ♂.

Hab. GUATEMALA, Calderas, Dueñas (*Champion*).

Closely allied to *A. spinosus*, but well distinguished by the different form of the tuber on the upper surface of the mandibles, which in *A. spinosus* is broad and convex in front and on the sides, and in the new species is a high compressed elevation, concave on its exterior face. It is also a smaller and rather narrower insect; but the colour and sculpture are very similar. Two examples only have been sent by Mr. Champion.

3. **Aplagiognathus serratus.**

Aplagiognathus serratus, Thoms. Syst. Ceramb. p. 578.

Hab. MEXICO.

Unknown to me.

NOTHOPLEURUS.

Nothopleurus, Lac. Gen. des Col. viii. p. 125.

The following are the only known species:—

1. **Nothopleurus ebeninus.**

Nothopleurus ebeninus, Lac. loc. cit.

Hab. YUCATAN.

2. **Nothopleurus gnatho.**

Mallodon gnatho, White, Cat. Col. Long. B. M. i. p. 45.

Hab. HONDURAS (*Dyson*).

Mr. C. O. Waterhouse has discovered that this species belongs to the genus *Nothopleurus.*

MALLODON.

Mallodon, Serv. Ann. Soc. Ent. Fr. 1832, p. 176.

Thirty-six species of this genus are enumerated in the Munich catalogue; some, however, have evidently been erroneously referred to it; and others are synonyms. Notwithstanding these deductions, the genus will remain a large one. Its head

quarters are America, temperate and tropical—species closely allied to Tropical-American ones being common insects in Western Africa, and others being recorded from Madagascar and Arabia. The species have all a similar general form and sculpture, and form a most difficult study; but trustworthy and definite characters may generally be found in the mandibles of the males and in the form of the genæ, which parts of structure have been overlooked by almost all describers.

1. **Mallodon spinibarbe.**

Mallodon spinibarbe, Linn. Mus. Lud. Ulr. p. 67.

Hab. MEXICO.—CAYENNE, AMAZONS, SOUTH BRAZIL.

Received from M. Henri Deyrolle, of Paris, as from Mexico.

2. **Mallodon molarium.** (Tab. I. figg. 10, 11.)

♂ *M. spinibarbi* (Lin.) simillimum, at differt margine superiore mandibularum juxta basin tuberculiformiter elevato. Elongato-oblongum, subdepressum, nigro-piceum, nitidum; capitis vertice grosse, epistomate subtiliter punctatis; genarum angulis antico-lateralibus productis, sed haud spiniformibus; thorace creberrime punctulato, plagis et lineis lævibus ut in *M. spinibarbi*.

♂ minor. Mandibulæ capite haud longiores.

♂ major. Mandibulæ capite dimidio longiores, spatium vacuum magnum ovatum includentes.

♀. Mandibulæ parvæ, tuberculo basali minus prominente; thoracis toto disco lævi polito; cæteris ut in ♂.

Long. 2 usque 3 poll. (mand. incl.) ♂, 1 poll. 9 lin. usque 2 poll. 6 lin. ♀.

Hab. MEXICO (*Sallé*); NICARAGUA (*Belt, Janson*); PANAMA.—COLOMBIA.

The figures are from Chontales specimens.

The males of minor development bear the closest possible general resemblance to the same sex of *M. spinibarbe*; but they may be readily distinguished by the form of the upper edge of the mandibles. In *M. spinibarbe* this edge describes an upward curve from the base; whilst in *M. molarium* there is a tubercular prominence at the base, after which the edge describes a downward curve; the result is to give a much greater vertical development to the mandible of *M. spinibarbe* as compared with that of *M. molarium*. In the males of greater development these peculiarities are still more strongly pronounced; and I have not seen males of *M. spinibarbe* with mandibles of the great length and curve which seem common in *M. molarium*. In the dentition of the inner side both species are very similar, presenting a little below the acute apex two obtuse teeth. There is another but minor specific difference in the form of the angles of the genæ or cheeks below the insertion of the mandibles: in both species the edge is slightly sinuated, and the angle forms a projection visible when the head of the insect is viewed from above; but in *M. molarium* the angle is blunt, whilst in *M. spinibarbe* it is developed into a distinct stout spine.

3. **Mallodon angustatum.**

Mallodon angustatum, Thoms. Physis, i. p. 100.

Hab. MEXICO; GUATEMALA, Chinautla, 4100 feet (*Salvin*), Capetillo (*Champion*); NICARAGUA, Chontales (*Belt, Janson*).

The angle of the genæ under the mandibles is obtusely tridentate; the upper edge of the mandibles is convex from the base, nearly as in *M. spinibarbe*.

4. **Mallodon mandibulare.**

Mallodon mandibulare, Gemminger, Col. Hefte, x. p. 254 (1872).
Mallodon gnatho, Leconte, Proc. Acad. Phil. 1858, p. 81.

Hab. Sonora (*Dr. Webb*).

Dr. Gemminger changed the name in consequence of the prior use of *gnatho* for a species then considered by White to be of the same genus. Although White's species has since proved not to be a *Mallodon*, the two genera are so closely allied that perhaps it is advisable to retain the correction, in order to avoid possible confusion.

TRICHODERES.

Trichoderes, Chevrolat, Mag. Zool. 1843, Ins. p. 35.

The following is the sole known species:—

1. **Trichoderes pini.**

Trichoderes pini, Chevr. loc. cit. p. 36, t. 113.

Hab. Mexico, Las Vegas (*Sallé*).

Subfam. *PŒCILOSOMINÆ.*

This subfamily is proposed to include those genera of Prionidæ which have finely-faceted eyes, and is equivalent to Lacordaire's "Cohorte III. Prionides vrais Pœcilosomes." The species, as a rule, are of brighter colours than those of the *Prioninæ*, and are diurnal in their habits. Nearly all are Tropical-American.

MALLASPIS.

Mallaspis, Serv. Ann. Soc. Ent. Fr. 1832, p. 188.

About a dozen species are known of this handsome genus, all American.

1. **Mallaspis moreleti.**

Mallaspis moreletii, Lucas, Ann. Soc. Ent. Fr. 1851, Bull. p. 65; Voy. de Castelnau, Zool. Ins. p. 180, t. 10. f. 7, *a*, ♀ (1859); Ann. Soc. Ent. Fr. 1861, p. 104, ♂.

Hab. Guatemala, Vera Paz (*Morelet*).

2. **Mallaspis rhombodera.** (Tab. II. figg. 4, 5.)

M. xanthaspidi (Guér.) affinis, at differt thorace antice valde angustato; supra viridi-ænea, elytris interdum castaneis æneo tinctis, vel toto rufo-castanea elytris apice obscurioribus; antennis æneis vel fulvo-castaneis; capite, thorace elytrorumque basi subconfluenter punctatis, his a triente anteriore usque ad apicem subtiliter vermiculato-rugulosis; scutello maculis aureo-sericeis duabus; antennis corpore multo brevioribus, articulis 3°–4^{m} dilatato-compressis, tertio quam sequens duplo longiore, cæteris compressis gradatim brevioribus.

Long. 1 poll. ad 1 poll. 7 lin.

Hab. Panama, Chiriqui (*Ribbe*).—Colombia.

The base of the thorax is of similar form to that of all the allied species; but the sides, from the lateral spine forward, converge somewhat unevenly to the anterior angles, which are close to the neck. In some examples of the female the anterior narrowing of the thorax is more abrupt and occurs nearer the front angles. The antennæ in what appear to be the males have the third and fourth joints more dilated and more oblong than in what appear to be the females, in which the third joint and following are of the same subovate form, the third only being conspicuously longer than the rest. The colour of the species is extremely variable.

3. **Mallaspis præcellens.** (Tab. II. fig. 8.)

Mallaspis præcellens, Bates, Trans. Ent. Soc. 1871, p. 376.

Hab. Panama, Chiriqui (*Ribbe*).

The male of this handsome species is brassy in colour, with a golden coppery tinge, especially on the antennæ and legs. The female is bluish green.

4. **Mallaspis belti.** (Tab. II. fig. 1, ♂; figg. 2, 3, ♀.)

Mallaspis beltii, Bates, Trans. Ent. Soc. 1869, p. 49.
Mallaspis salvini, Bates, Trans. Ent. Soc. 1869, p. 49 (var.).

Hab. Nicaragua, Chontales (*Belt, Janson*), Costa Rica.

The Costa-Rican examples described as *M. salvini* differ from the type in being of smaller size, and the elytra being relatively shorter; the antennæ also in the male are metallic in colour. Additional specimens from the same country show that these differences are not constant, and indicate only an unstable local variety. The female of the typical *M. belti* in Chontales varies greatly in colour, the extreme variety being of a dull reddish-golden hue.

5. **Mallaspis longiceps.**

Mallaspis longiceps, White, Cat. Long. Col. B. M. i. p. 52, t. 2. f. 7.

Hab. Mexico (*Sallé, Boucard*).

6. **Mallaspis paradoxa.** (Tab. II. fig. 6.)

Mallaspis paradoxa, Bates, Trans. Ent. Soc. 1869, p. 383; 1872, p. 168.

Hab. Nicaragua, Chontales (*Belt, Janson*); Costa Rica (*Rogers*).

7. **Mallaspis trichostetha.** (Tab. II. fig. 7.)

♂ aurato-ænea, infra et scutello aurato-sericeo-pubescens; capite minus elongato, confluenter grosse punctato; antennis quam corpus triente longioribus, articulis linearibus, tertio quam quartus paulo longiore, 4°–10^{m} fere æqualibus, his (4to basi excepto) piceo-opacis; thorace parvo, spina laterali (valde elongata et acuta) in medio sita, lateribus postice usque ad angulos obliquis haud sinuatis, antice denticulatis, angulis anterioribus productis; elytris paulo inæqualibus, coriaceis et intricato-rugosis.

Long. 1 poll. ♂.

Hab. Costa Rica, Volcan de Irazu, 6000–7000 feet (*Rogers*).

Differs from its congeners somewhat in facies, the difference being due chiefly to the form of its thorax, the lateral spine of which is exactly median, very long and sharp and nearly straight. With this is combined the relatively small size of the thorax, not only as to its length, but also its breadth, the width (exclusive of the spines) being only half that of the elytra. The antennæ are very long, about a fourth longer than the body; and none of the joints make any approach to the oval form so frequent in the genus. The opaque joints are very minutely striated.

PYRODES.

Pyrodes, Serv. Ann. Soc. Ent. Fr. 1832, p. 186.

Ten or twelve species of this genus are known, all inhabiting Tropical America.

1. **Pyrodes tenuicornis.**

Pyrodes tenuicornis, White, Proc. Zool. Soc. 1850, p. 11, t. 13. f. 5.

Hab. Mexico, Oaxaca (*Fenochio*).

2. **Pyrodes marginatus.**

Pyrodes marginatus, White, Cat. Long. Col. B. M. i. p. 49.

Hab. Guatemala.

In the Munich Catalogue *P. tenuicornis* and *P. marginatus* are entered as the sexes of one species. I am inclined to doubt the correctness of this view, as the examples of the two forms (one of each) which I have been able to examine appear to be both males.

OTHEOSTETHUS.

Otheostethus, Bates, Trans. Ent. Soc. 1872, p. 169.

The only species known is the following:—

1. **Otheostethus melanurus.** (Tab. II. fig. 12.)

Otheostethus melanurus, Bates, Trans. Ent. Soc. 1872, p. 170.

Hab. Nicaragua, Chontales (*Belt*).

HOLONOTUS.

Holonotus, Thoms. Class. Long. p. 304.

A genus peculiar, as far as at present known, to Central America and Mexico. It is doubtful, however, if its separation can be maintained from the North-American *Sphenostethus* (occurring in the middle Atlantic States), in which case its distribution would be extended into north temperate latitudes. It is nearly allied to *Solenoptera* and allied

genera, found only in the West Indies. Three species have been recorded, all of which are rare.

1. **Holonotus nigroæneus.** (Tab. II. fig. 11.)

Holonotus nigroæneus, Bates, Trans. Ent. Soc. 1869, p. 57 ; id. 1872, p. 169.

Hab. NICARAGUA (*Belt*, *Janson*).

A variety of this insect occurs with bright red femora and tibiæ.

2. **Holonotus lævithorax.**

Solenoptera lævithorax, White, Cat. Long. Col. B. M. i. p. 54.

Hab. GUATEMALA (*Deby*).

3. **Holonotus latithorax.**

Holonotus latithorax, Thoms. Class. Long. p. 305.

Hab. MEXICO.

Fam. CERAMBYCIDÆ.

Subfam. *CERAMBYCINÆ.*

This subfamily is proposed here provisionally to include all Cerambycids with coarsely-faceted eyes. It comprehends Lacordaire's "Cérambycides aberrants" as well as Section A of his "Cérambycides vrais sylvains." Thus conceived it embraces a prodigious number and diversity of generic forms, which no doubt contain the elements of several subfamilies equivalent to the "Prioninæ." A thorough revision, founded on all the material contained in the large public and private collections of Europe, would be required to settle the limits of the larger groups of genera in question.

THAUMASUS.

Thaumasus, Reiche, Ann. Soc. Ent. Fr. 1853, p. 419.

1. **Thaumasus gigas.**

Ips gigas, Oliv. Journ. Nat. Hist. i. p. 267, t. 14. f. 6 (1792).

Thaumasus gigas, Reiche, Ann. Soc. Ent. Fr. 1853, p. 422, t. 13. iv. f. 1, 1*a*.

Hab. COSTA RICA.—COLOMBIA.

Notwithstanding the very different facies, the shortness of the antennæ, and other points of structure, I believe the real affinities of this remarkable insect lie in the direction of *Torneutes* and *Diploschema*. The following genus forms, to some extent, a connecting link between these genera.

XENAMBYX.

Prionidis (gen. *Macrotoma*, *Aplagiognathus*) quoad formam similis, sed generibus *Diploschemati* et affinibus certe affinis. Elongatus, robustus, fere cylindricus. Caput antice breve; frons lata, concava; labrum exsertum; mandibulæ breves latæ, edentatæ; palpi breves, articulis terminalibus majoribus, cupuliformibus; oculi distantes, magni, grosse granulati, fortiter emarginati; tubera antennifera magna, obliqua; antennæ (♀?) breves, thoracis basin paullo superantes, scapo gradatim incrassato, articulis 3°–10^{m} serratis, 11° appendiculato, 4°–11^{m} intus fovea elongata porifera; thorax fere orbiculatus inermis; elytra paralella, apice lata, subtruncata, ad suturam spinosa; prosternum absque processu inter coxas, his contiguis oblique exsertis, acetabulis extus paullo elongatis; mesosternum inter coxas angustissimum, acetabulis extus late apertis; metasternum elongatum; episternum latum, postice sensim angustatum apice acuto; abdomen segmentis æqualibus, ultimo (dorsali et ventrali) latissimo; pedes minus elongati, simplices, tibiis apice extus haud spinosis; tarsi articulo primo triangulari, haud elongato, tertio bilobo, plantis dense æqualiter velutinis.

In general form the insect for which this genus is proposed resembles so strongly a Prionid of the genera allied to *Macrotoma* that it would be certainly placed among them if attention were not given to its essential characters; the most decisive of which are the simple rounded sides of the thorax and the relative shortness of the sockets of the haunches of the anterior legs. The distinctly articulated labrum is a further point of distinction from the Prionidæ. From the genera to which it is nearest allied (*Spathopygus*, *Diploschema*, &c.) it is distinguished by the absence of prosternal process and the exserted fore coxæ.

1. **Xenambyx laticauda.**

Fusco-castaneus, capite, antennis thoraceque supra nigris, pedibus rufescentibus; capite, mandibulis basi antennarumque scapo crebrè punctatis, breviter sparsim fulvo-pilosis; thorace disco discrete, lateribus subrugose, grosse punctato, parte discoidali a lateribus linea abbreviata indistincta separata, linea autem abbreviata dorsali prope basin impressa; elytris passim haud crebre punctatis vage longitudinaliter sulcatis.

Long. 1 poll. 7 lin. ♀?

Hab. GUATEMALA (from W. W. Saunders's collection).

The unique specimen is probably a female, judging from the shortness of the antennæ and the slenderness of the legs; the apical segment of the abdomen, however, is of the form we usually find distinctive of the male, the plates, both ventral and dorsal, being sinuated in the middle. The pubescence of the head, thorax, and antennæ is erect and not so close as to obscure the slight gloss of the integument. The antennæ are punctured throughout, the scape only densely. The elytra are of a light tawny-brown colour, darker and castaneous towards the base.

SPONDYLIS.

Spondylis, Fabr. Syst. Entom. i. 2, p. 358.

Three species of this aberrant genus of Cerambycidæ have been described from north temperate parts of Europe, Asia, and North America. They live in the wood of pine trees.

1. **Spondylis mexicanus.**

Sp. upiformi affinis. Elongatus, angustus, niger subnitidus, densissime (supra scabrose) punctatus, elytris exceptis erecte nigro-setosus ; thorace ovato, subcordato, postice gradatim recte angustato, angulis posticis haud productis ; elytris utrinque sutura et costis quatuor (apicem fere attingentibus) elevatis ; tibiis latis, compressis, calcaribus posticis latis, obtusis.

Long. 10½ lin.

Hab. Mexico, near the capital (*Flohr*).

Distinguished from the Boreal-American species *S. upiformis* by its larger size and the quadricostate elytra. The thorax, too, is somewhat different in form, the sides being straight and not sinuate before the hind angles, and the latter not being prominent. The form of the legs and the spurs of the hind tibiæ is similar in both species.

CRIOCEPHALUS.

Criocephalus, Mulsant, Coléop. Fr. Long. ed. i. p. 63 (1839).

The species of this genus, eleven in number, are restricted, like *Spondylis*, to the northern parts of the eastern and western hemispheres, one only having been found beyond the temperate zone, in Mexico, where it occurs in pine-forests at the higher elevations.

1. **Criocephalus mexicanus.**

Criocephalus mexicanus, Thoms. Class. Long. p. 260.

Hab. Mexico, near the capital (*Flohr*).

MALACOPTERUS.

Malacopterus, Serv. Ann. Soc. Ent. Fr. 1833, p. 565.
Ganimus, Leconte, Smithsonian Misc. Coll. part ii. Long. p. 173.

Exclusively American. Five species have been described, ranging from California to Tucuman. I judge *Ganimus* (Lec.) to be synonymous from the excellent description, which fits well the species allied to *M. lineatus*.

1. **Malacopterus lineatus.** (Tab. III. fig. 17.)

Malacopterus lineatus, Guérin, Icon. R. An. iii. p. 222[1].

Hab. Nicaragua, Chontales (*Belt, Janson*).—Colombia[1]; Venezuela; Amazons.

2. **Malacopterus mexicanus.**

Malacopterus mexicanus, Thoms. Class. Long. p. 248.

Hab. Mexico.

Very closely allied to, if not identical with, *M. lineatus*.

TRISTACHYCERA.

Tristachycera, Bates, Trans. Ent. Soc. 1872, p. 170.

One species only is known.

1. **Tristachycera viridis.** (Tab. III. fig. 7.)

Tristachycera viridis, Bates, loc. cit. p. 171.

Hab. NICARAGUA, Chontales (*Belt*).

ACHRYSON.

Achryson, Serv. Ann. Soc. Ent. Fr. 1833, p. 572.

Exclusively American, extending a little beyond the tropics, both north and south. Eleven species have been described.

1. **Achryson surinamum.**

Cerambgx surinamus, Linn. Syst. Nat. i. p. 632 (1767).
Cerambyx surinamensis, Oliv. Ent. no. 67, p. 42, t. 13. f. 93 (1795).
Stenocorus circumflexus, Fab. Mant. Ins. i. p. 144 (1787).
Var. *chontalense,* Bates, Trans. Ent. Soc. 1872, p. 171.

Hab. NORTH AMERICA, Middle States.—MEXICO; GUATEMALA; NICARAGUA; COSTA RICA.—SOUTH AMERICA, generally distributed to Paraguay.

HAMMATICHERUS.

Hammaticherus, Serv. Ann. Soc. Ent. Fr. 1834, p. 15.

Exclusively American, but closely allied to *Plocæderus*, which is an African and Indian genus. Eight species of *Hammaticherus* are known.

1. **Hammaticherus castaneus.** (Tab III. fig. 2.)

Hammaticherus castaneus, Bates, Trans. Ent. Soc. 1870, p. 250.

Hab. NICARAGUA, Chontales (*Belt, Janson*).—SOUTH BRAZIL.

2. **Hammaticherus mexicanus.**

Hammaticherus mexicanus, Thoms. Class. Long. p. 196; Bates, Trans. Ent. Soc. 1872, p. 171.

Hab. MEXICO.

ATYLOSTAGMA.

Atylostagma, White, Cat. Long. Col. B. M. i. p. 97.

The following is the sole known species:—

1. **Atylostagma politum.**

Atylostagma politum, White, loc. cit. p. 97, t. 3. f. 5.

Hab. HONDURAS (*Dyson*).

SPHALLENUM.

Sphallenum, Bates, Trans. Ent. Soc. 1870, p. 253.

Six species, exclusively Tropical-American.

1. **Sphallenum robustum.** (Tab. III. fig. 8.)

Sphallenum robustum, Bates, Trans. Ent. Soc. 1872, p. 172.

Hab. NICARAGUA, Chontales (*Belt*).

XESTIA.

Xestia, Serv. Ann. Soc. Ent. Fr. 1834, p. 16.

Also confined in range to Tropical America. About a dozen species have been described; and many others exist unpublished in collections.

1. **Xestia pilosovittata.** (Tab. III. fig. 10.)

Xestia pilosovittata, Bates, Trans. Ent. Soc. 1872, p. 172.

Hab. NICARAGUA, Chontales (*Belt*, *Janson*).

2. **Xestia nitida.** (Tab. III. fig. 11.)

Xestia nitida, Bates, Trans. Ent. Soc. 1872, p. 172.

Hab. NICARAGUA, Chontales (*Belt*).

3. **Xestia sagittaria.** (Tab. III. fig. 9.)

Xestia sagittaria, Bates, Trans. Ent. Soc. 1872, p. 173.

Hab. NICARAGUA, Chontales (*Belt*).

GNAPHALODES.

Gnaphalodes, Thoms. Class. Long. p. 235.

The following is the only known species:—

1. **Gnaphalodes trachyderoides.**

Gnaphalodes trachyderoïdes, Thoms. *l. c.* p. 236[1].

Hab. NORTH AMERICA, Texas (*Leconte*).—MEXICO[1]; NICARAGUA, Chontales (*Belt*).

PERILASIUS.

Gen. *Pantomallo* affinis, at differt, inter alia, antennis sulcatis. Corpus elongatum, minus covexum, griseo pubescens. Caput antice breve, epistomate a fronte sulculo separato. Palpi (♂) maxillares elongati. Antennæ (♂) corpore plusquam dimidio longiores, infra dense, supra sparsius hirsutæ; articulis 3°–11ᵐ longitudine æqualibus, tertio robustiore supra late sulcato, sequentibus sulcis obsoletis, undecimo haud appendiculato. Antennæ (♀) corpore paullo breviores, articulo tertio haud robustiore; sulco obsoleto. Thorax elongato-subovatus, lateribus medio (♂) inermibus, (♀) breviter spinosis; dorsum in utroque sexu tuberculis nitidis tribus. Elytra fere parallela, apice suturali spinoso; supra crebre punctulata punctisque sparsis nitidis inspersa. Pedes modice elongati, simplices; femora medio latiora; tarsi postici articulo primo sequentibus duobus æquali. Prosternum inter coxas arcuatum; mesosternum latum, planum.

In general form and most of the essential characters this new genus agrees with *Pantomallus*; but it differs from that and all genera of the *Hesperophanina* group by its sulcate antennæ. The sulci, however, are not distinct except on the third joint and in the males, in which sex this joint is also thicker from base to apex than the remain-

ing joints. There is a faint raised line on the sides of several of the joints following the third, which indicates the margin of an obsolete groove. The femora, especially in the males, are much thicker than in *Pantomallus*, *Chion*, and other allied genera, resembling the robust form of the same members in *Phacodes*. In the markings of the elytra the genus bears no resemblance to *Pantomallus*, reminding one rather of *Hesperophanes*.

The genus *Osmidus* of Leconte, found in Lower California, must be very closely allied to the present one, judging from the description. It wants, however, the antennal grooves.

1. **Perilasius championi.**

Rufo-fuscus, omnino subtiliter griseo incumbenti-pubescens, et sparsius erecte pilosus; scutello albo; thorace vage rugoso-punctato, supra paullo inæquali, tuberculis dorsalibus nitidis tribus, mediano interdum elongato, et disco utrinque linea indistincta elevata usque ad marginem posticum extensa; elytris ♂ apice breviter truncatis, ♀ rotundatis sutura spinosa, dorso haud profunde crebre punctulatis, punctisque nitidis majoribus passim inspersis.

Long. 8 usque 13 lin. ♂ ♀.

Hab. GUATEMALA, Capetillo (*Champion*).

The sparsely scattered shining punctures of the elytra are obliquely impressed, and each bears a stiff bristle. The antennæ are altogether more robust in the male than in the female; and the joints from the third to the eleventh are almost exactly equal in length—this latter character distinguishing well the genus from *Brothylus* (Leconte), the markings of which appear to be very similar to those of our species. The eleventh joint is curved, and bears no trace of appendage or false twelfth joint; and all the joints in both sexes are rather closely and finely ciliated beneath.

PANTOMALLUS.

Pantomallus, Lacord. Gen. Col. viii. p. 286.
Eburia, Serv. Ann. Soc. Ent. Fr. 1834, p. 10.

Four or five species, all Tropical-American.

1. **Pantomallus fuligineus.** (Tab. III. fig. 4.)

Pantomallus fuligineus, Bates, Trans. Ent. Soc. 1872, p. 173.

Hab. NICARAGUA, Chontales (*Belt*).

CHLORIDA.

Chlorida, Serv. Ann. Soc. Ent. Fr. 1834, p. 31.

Nine species, confined to Tropical America.

1. **Chlorida festiva.**

Cerambyx festivus, Linn. Syst. Nat. ed. 12, i. 2, p. 623.

Chlorida festiva, Serv. Ann. Soc. Ent. Fr. 1834, p. 31.
Cerambyx sulcatus, Oliv. Ent. no. 67, p. 28, pl. 16. fig. 113.

Hab. NICARAGUA, Chontales (*Belt*, *Janson*).—SOUTH AMERICA, widely distributed to South Brazil.

2. **Chlorida cincta.**

Chlorida cincta, Guérin, Rev. Zool. 1844, p. 259.

Hab. MEXICO; NICARAGUA, Chontales (*Belt*, *Janson*).

STYLICEPS.

Styliceps, Lacord. Gen. Col. viii. p. 292, note (1869).
Ceragenia (partim), Pascoe, Trans. Ent. Soc. 2nd ser. v. p. 16 (1858); Thoms. Class. Long. p. 210 (1860).

The only known species is the following:—

1. **Styliceps sericata.** (Tab. III. fig. 1.)

Ceragenia sericatus, Pascoe, Trans. Ent. Soc. 2nd ser. v. p. 16 (1858).
Styliceps sericans, Lacord. Gen. Col. viii. p. 292, et Atlas, t. 85. fig. 3 (1869).

Hab. NICARAGUA, Chontales (*Belt*, *Janson*).—SOUTH AMERICA, Cayenne, Amazons.

A specimen taken by Mr. Belt at Chontales is much darker in colour than that represented in our figure (which is the ordinary form), being sooty brown, but with the same silky lustre as the type. It appears to be only an accidental variation.

EBURIA.

Eburia, Serv. Ann. Soc. Ent. Fr. 1834, p. 8.

About forty species of this elegant and exclusively American genus have been described. They are generally very local, and occur in temperate as well as in tropical latitudes; but none, I believe, has been recorded from so far north as Canada, or so far south as Chili. Some are found in the West Indies; and one species is described from the Galapagos. The larvæ feed in the interior of large decaying forest-trees. The genus is limited here to those species which have simple antennæ, those with sharply-grooved joints forming the genus *Eburodacrys*.

1. **Eburia stigmatica.**

Eburia stigmatica, Chevr. Col. du Mexique, fasc. 3 (1834).

Hab. MEXICO (*Sallé*).

2. **Eburia perforata.**

Eburia perforata, Leconte, Smithson. Miscell. Coll. 264, part ii. p. 180.

Hab. NORTH AMERICA, Texas.—NORTHERN MEXICO.

3. **Eburia stigma.**

Cerambyx stigma, Oliv. Ent. no. 67, p. 126, t. 23. fig. 180.

Hab. NICARAGUA, Chontales (*Belt*).—WEST INDIES, Cuba.

I have seen only one Central-American example of this species.

4. **Eburia blancaneaui.**

Robusta, cinereo-fusca, sparsissime pilosa; thorace punctis magnis confluentibus scabroso, spinis lateralibus acutissimis, tuberculis duobus dorsalibus fuscis; capite tuberibus antenniferis antice excavatis; antennis cinereo-rufescentibus, scapo obscuriore, antice sulcato; elytris apice singulatim rotundatis, sutura spinosa, supra subtilissime alutaceis vix punctulatis, utrinque lineolis geminatis eburneis quatuor, duabus basalibus haud contiguis (quarum exterior dimidio minor) duabusque medianis elongatis (interiore quam exterior dimidio breviore), lineis autem discoidalibus inter lineolas eburneas marginibusque anguste fusco-nigris; femoribus quatuor posticis brevissime et æqualiter bidentatis.

Long. 13 lin. ♀.

Hab. HONDURAS, river Sarstoon (*Blancaneau*).

Nearly as robust in form as *E. stigmatica*, similar in colour but a little redder, distinguished from this and allied species by the very large confluent punctures of the thorax and the rounded apices of the elytra. The ivory-like lines are elongated, being similar in relative length to those of *Eburodacrys havanensis*; the exterior median lineole is far from attaining the great length it does in *E. macrotænia*.

5. **Eburia pedestris.** (Tab. III. fig. 3.)

Eburia pedestris, White, Cat. Col. Long. B. M. i. p. 88[1].

Hab. HONDURAS[1]; NICARAGUA, Chontales (*Belt*, *Janson*).

6. **Eburia macrotænia.**

Valde elongata, fulva, subtilissime pubescens, thoracis spinis tuberculisque et antennarum articulis apice nigris; capite inter antennas sulco profundo; antennis (♀?) quam corpus paullo longioribus, scapo elongato sensim incrassato, articulis 3°–11ᵐ æqualibus infra ciliatis; thorace elytris multum angustiore sparsim rugoso, spinis lateralibus longis acutis, tuberculis antico-laterali et quinque dorsalibus nigris politis; elytris subtilissime coriaceis et versus basin punctatis, apice truncatis et singulis bispinosis, supra utrinque lineis eburneis quatuor in vitta nigra sitis, duabus basalibus æqualibus, duabusque pone medium valde inæqualibus exteriore quam interior triplo longiore; corpore subtus femoribusque infuscatis, his quatuor posticis bispinosis.

Long. 12 lin.

Hab. GUATEMALA, Capetillo (*Champion*).

Agrees in general form with *E. pedestris*, but is distinguished at once by the long linear form of the ivory-like spots of the elytra and also by the five discoidal tubercles of the thorax. These tubercles are more conspicuous than in other *Eburiæ*—the ordinary three anterior ones being large, elevated, and glossy, and supplemented by the hinder elevations of the disk on each side, which are a little more raised than usual and coloured black.

7. **Eburia championi.**

E. pedestri paullum robustior, cinereo-fusca, subtilissime pubescens; thorace spinis lateralibus conicis acutis, tuberculis antico-laterali et duobus dorsalibus conico-elevatis, nigris, dorso vermiculato-rugoso; elytris

apice truncatis et singulis bispinosis, supra utrinque maculis eburneis sublinearibus geminatis nigro marginatis quatuor, duabus basalibus (exteriore paullo longiore) duabusque pone medium (quarum exterior interiore duplo longior); antennis (♂) quam corpus duplo longioribus unicoloribus, scapo robusto antice sulcato; pedibus fulvo-rufis, femoribus quatuor posterioribus longe unispinosis.

Long. 15 lin. ♂.

Hab. GUATEMALA, Capetillo (*Champion*).

A fine species, of a light tawny-brown hue, densely clothed with fine ashy pubescence, and bearing a striking resemblance at first sight to *Pantomallus fuligineus*, from which its spinose hinder femora at once distinguish it. The ivory-like spots of the elytra are larger, broader, and each pair closer together than in *Pantomallus fuligineus*, and are much narrower and more linear than those in *Eburia pedestris*. The exterior spot of the basal pair is relatively much longer than the corresponding spot in *E. pedestris*; and the corresponding spot in the hinder pair is double the length of the inner spot. The thorax is sculptured almost as in *E. pedestris*, being faintly and not densely roughened with vermiculate rugæ.

8. **Eburia brevispinis.**

E. stigmati et *duvalii* proxime affinis, rufescenti-fusca, erecte pilosa, pedibus antennisque fulvo-rufis, subtiliter griseo-pubescens; elytris punctulatis punctisque majoribus intermixtis, utrinque lineolis quatuor geminatis sed haud contiguis, duabus basalibus brevibus æqualibus duabusque pone medium in vittula nigra sitis inæqualibus (exteriore quam interior duplo longiore); elytris apice sinuatis, angulo suturali breviter, exteriore paullum longius spinoso; thorace vage rugoso, vix inæquali, spinis lateralibus brevissimis obtusis, tuberculo antico-laterali et duobus dorsalibus nigris nitidis; femoribus quatuor posticis breviter unispinosis.

Long. 10 lin. ♂ ♀.

Hab. MEXICO, Soledad, Jalapa (*Höge*).

Very similar in facies to the West-Indian *E. stigma* and *E. duvalii*, but differing from both in the shorter femoral spines (the exterior one being extremely short), and from *E. duvalii* in the elytral and thoracic spines being also much shorter. The colour is also more rufescent (approaching *E. pedestris*) than in either species. In the punctation of the elytra the mixture of rather large punctures with the minuter sculpture is notable, each puncture giving rise to a long erect stiff hair, which features are absent from the allied species. The ivory-like spots of the elytra are surrounded with black, which colour is lengthened moderately before and behind, the streak from the exterior median line nearly reaching the corresponding basal line.

In the male the thorax has a short dorsal black line in addition to the tubercles.

9. **Eburia ægrota.**

Subcylindrica, gracilis, pallide fulva, opaca, breviter erecte pilosa; thorace angusto, vage punctato-rugoso, tuberculis duobus disci nigris nitidis, spinis lateralibus post medium fulvis; elytris apice breviter sinuato-truncatis, angulo exteriore spinoso, suturali acuto, supra creberrime punctulatis, utrinque maculis subelongatis quatuor geminatis eburneis (basalibus æqualibus, medianis longioribus) contiguis; femoribus quatuor posticis spina interna elongata valida.

Long. $7\frac{1}{2}$ lin. ♀.

Hab. MEXICO, Plan del Rio (*Höge*).

A small and slender species for this genus, resembling the typical *Eburodacrys*. A distinguishing character is the absence of antero-lateral tubercles from the thorax, although the lateral spine is well-developed, conical, and acute. The usual exterior spines of the hinder femora are quite obsolete. The geminated eburneous spots are closely contiguous, both basal and median pairs, and are narrowly margined with brown.

10. **Eburia laticollis.**

Obscure rufescenti-fusca, subtilissime pubescens et erecte pilosa; antennis scapo (♂) brevi, mox a basi incrassato; thorace magno, subrotundato, spinis lateralibus minutissimis, tuberculis duobus disci solum nigris politis; elytris apice breviter bispinosis, supra crebre punctulatis punctisque majoribus intermixtis, lineolis brevibus utrinque quatuor geminatis sed haud contiguis, duabus basalibus brevissimis interiore longiore, duabus medianis paullo longioribus, in nebula nigra sitis, interiore multo minore; femoribus quatuor posticis spinis brevissimis vix conspicuis, æqualibus.

Long. $8\frac{1}{2}$ lin. ♂.

Hab. MEXICO (*Hegewisch*).

Although agreeing in the sculpture and clothing of the elytra with *E. brevispinis*, this species has quite a different facies, due chiefly to its broad rounded thorax. The short thick form of its antennal scape is a good specific character.

11. **Eburia mutica.**

Eburia mutica, Leconte, Proc. Ac. Phil. vi. 1853, p. 233.

Hab. TEXAS.—MEXICO.

12. **Eburia rufobrunnea.**

Eburia rufobrunnea, Perroud, Mélanges Entomologiques, 3ᵉ partie, 1855, p. 47.

Hab. GUATEMALA.

The elytra, according to the description, have each three successive and detached ivory-like spots; and the femora are unarmed.

13. **Eburia ovicollis.**

Eburia ovicollis, Leconte, Smithson. Miscell. Coll. 264, part ii. p. 180.

Hab. NORTH AMERICA, Texas.—NORTHERN MEXICO.

EBURODACRYS.

Eburodacrys, White, Cat. Col. Long. B.M. i. p. 93 (non descr.); Thoms. Class. Long. p. 238.
Eburia (partim), Serv. Ann. Soc. Ent. Fr. 1834, p. 8.

This genus comprehends all those species, formerly included in *Eburia*, which have grooved antennæ. They are generally of smaller size and more slender form than the *Eburiæ*, and are about equally numerous, though fewer have yet been described. They are, however, more generally continental and tropical than the *Eburiæ*, only one being

known from the West Indies, and none being yet recorded from the United States. In the south they pass a little beyond the tropic, species being known from Paraná and Rio Grande do Sul.

1. **Eburodacrys havanensis.**

Eburodacrys havanensis, Chevrolat, Ann. Soc. Ent. Fr. 1862, p. 267.

Hab. NICARAGUA, Chontales (*Belt, Janson*); COSTA RICA (*Rogers*).—CUBA; VENEZUELA.

2. **Eburodacrys callixantha.** (Tab. III. fig. 5.)

Eburodacrys callixantha, Bates, Trans. Ent. Soc. 1872, p. 174.

Hab. NICARAGUA, Chontales (*Belt, Janson*).

3. **Eburodacrys asperula.**

Eb. callixanthæ proxime affinis, at differt maculis eburneis angustioribus, posteriorum macula exteriore quam interior duplo longiore, lineari. Angusta, subcylindrica, passim longe et subdense pilosa, testaceo-fulva; thorace indistincte transversim ruguloso, tuberculis disci duobus nigris, spina laterali fulva; elytris (apice excepto) creberrime punctulatis, apice truncatis, angulis acutis, exteriore spiniformi, maculis eburneis sublinearibus utrinque tribus nigro cinctis, una basali duabusque valde inæqualibus medianis.

Long. 6 lin.

Hab. MEXICO, Plan del Rio (*Höge*).

4. **Eburodacrys sticticollis.** (Tab. III. fig. 6.)

Eburodacrys sticticollis, Bates, Trans. Ent. Soc. 1873, p. 220.

Hab. NICARAGUA, Chontales (*Belt*).

5. **Eburodacrys mexicana.**

Eburodacrys mexicana, Thoms. Class. Long. p. 239.

Hab. MEXICO.

ROMALEUM.

Romaleum, White, Cat. Col. Long. B. M. ii. p. 309.
Elaphidion (partim), White, ib. i. p. 99.
Elaphidion (partim), Serv. Ann. Soc. Ent. Fr. 1834, p. 66.
Hypermallus (partim), Lacord. Gen. Coléop. viii. p. 303.
Romaleum, Leconte, Smithson. Misc. Coll. no. 264, part ii. p. 181.

Leconte points out, as distinguishing this genus (or subgenus, as he prefers to term it) from *Elaphidion* (and *Hypermallus*), the following characters:—form more robust; episterna of the mesothorax wider in front and gradually narrowed behind; prothorax wider, more coarsely punctured in the ♀ than in the ♂; and the antennæ with distinct sensitive spaces, commencing with the fourth joint. The group seems a natural one; five species inhabiting the southern parts of the United States belong to it, one of which extends its range to Mexico.

1. **Romaleum atomarium.**

Cerambyx atomarius, Drury, Ill. i. p. 93, pl. 41. f. 6, et ii. index.
Cerambyx pulverulentus, De Geer, Ins. v. p. 118, pl. 14. f. 12.
Stenocorus marylandicus, Fabr. Syst. Ent. p. 179.
Callidium marylandicum, Oliv. Ent. iv. no. 70, p. 6, pl. 1. f. 5.
Enaphalodes simplicicollis, Haldem. Proc. Ac. Phil. iii. p. 151 (var.).

Hab. North America, Southern United States.—Mexico, Paso del Macho (*Höge*).

One specimen only has been sent home by Höge. It presents all the characters of Texan examples, except being much more slender and showing a feebler development of the antenniferous tubercles (the angles of which are not pointed) and of the antennal spines. It is impossible from a single example to decide whether these are only individual peculiarities or characters of a distinct local form or species.

ELAPHIDION.

Elaphidion, Serv. Ann. Soc. Ent. Fr. 1834, p. 66; Lacord. Gen. Col. viii. p. 300.

Lacordaire restricted the old genus *Elaphidion* to the limited number of species in which the pro- and mesosterna have their opposing faces vertical or nearly so, and the posterior femora spined, instituting a genus *Hypermallus* for the remainder. The separation has not proved satisfactory; and Dr. Leconte, in his important work on the North-American Longicornia (Smithson. Miscell. Coll. part ii. 1873), has recombined *Hypermallus* with the more typical forms. We here retain the genera as characterized by the author of the 'Genera.' *Elaphidion* in its restricted sense contains four or five species, peculiar to the West Indies and North and Central America.

1. **Elaphidion bidens.**

Stenocorus bidens, Fab. Mant. Ins. i. p. 143.
Elaphidion bidens, White, Cat. Col. Long. B. M. i. p. 100[1].

Hab. West Indies.—Honduras[1].

2. **Elaphidion irroratum.**

Cerambyx irroratus, Linn. Syst. Nat. ed. 12, i. 2, p. 633; Oliv. Entom. iv. no. 67, p. 45, t. 12. f. 163.

Hab. North America.—Mexico; Nicaragua, Chontales (*Belt, Janson*).—West Indies.

3. **Elaphidion coronatum.** (Tab. III. fig. 12.)

Elaphidion coronatum, White, Cat. Col. Long. B. M. i. p. 100[1].

Hab. Guatemala, Honduras[1]; Nicaragua, Chontales (*Belt, Janson*).

Differs from the typical species in wanting the long apical spine to the four posterior femora. The femora also are more clavate.

HYPERMALLUS.

Hypermallus, Lacord. Gen. Col. viii. p. 302.
Elaphidion (pars), Newman, White, Leconte.

The range of this genus is much wider than that of *Elaphidion*, although still confined to the American continent. The majority of the species occur in the south temperate latitudes of North America and in the West Indies; but some are found in Brazil, and as far south as Paraná and Buenos Ayres. About fifty have been described; but many of them probably do not strictly belong to the genus.

1. Hypermallus gibbulus.

H. incerto (Newm.) similis, at differt thorace magis convexo, dorsoque fere integro. Elongatus, fuscus, antennis pedibusque fusco-rufescentibus, fusco breviter pilosus, thorace elytrisque maculatim cinereo-tomentosis; thorace valde rotundato, supra convexo, confertissime punctulato, haud tuberculato, linea brevi dorsali guttisque utrinque politis; scutello cinereo; elytris recte truncatis, angulo suturali breviter spinoso, supra confertim punctatis, apicem versus punctulatis; metathoracis episternis fere parallelis.
Long. 8 lin.

Hab. Mexico, Paso del Macho (*Höge*).

Closely resembling *H. incertus* (Newm.) in form and colouring, but distinguished at once by the absence of dorsal callosities from the thorax, which is more rounded on the sides and more evenly convex, the surface being varied only by a short polished streak in the middle of the dorsal line and a small spot or two on each side of the disk, scarcely visible in some specimens. The tawny ashy tomentose spots are scattered over the elytra, being more confluent near the base and on the sides than towards the apex. The apex itself is spined only at the sutural angle of the straight truncature, the exterior angle being simply acute and not spiniform as in *H. incertus*.

2. Hypermallus undulatus.

Fere cylindricus, atro-fuscus, cinereo incumbenti-pubescens, thorace guttis, scutello, elytris fascia mediana undulata maculaque utrinque ante apicem canis; thorace oblongo, lateribus ante medium rotundatis, toto pronoto eleganter reticulato-punctato; elytris apice integris, supra æqualiter crebre punctulatis; pectore femoribusque crebre punctatis; antennis articulis 3°–4ᵐ apice breviter spinosis.
Long. $5\frac{1}{2}$ lin.

Hab. Mexico, Trapiche (*Höge*).

A very distinct species, resembling the West-Indian *H. transversus* (White) in the regular alveolate sculpture of the pronotum, without trace of inequality or callosities; but the prothorax is much narrower and more elongate than in *H. transversus*, and the species differs in the less spinose antennæ and apex of the elytra. The episterna of the mesothorax gradually but slightly taper from base to apex; they are, however, narrow throughout and not wide at the base as in *Romaleum*.

3. Hypermallus scabricollis. (Tab. III. fig. 13.)

Hypermallus scabricollis, Bates, Trans. Ent. Soc. 1872, p. 175.

Hab. Nicaragua, Chontales (*Belt*).

4. **Hypermallus dædaleus.** (Tab. III. fig. 14.)

Hypermallus dædaleus, Bates, Trans. Ent. Soc. 1873, p. 219.

Hab. NICARAGUA, Chontales (*Belt*).

5. **Hypermallus lævis.**

Elaphidion læve, White, Cat. Col. Long. B. M. i. p. 102.

Hab. HONDURAS.

6. **Hypermallus mœstus.**

Elaphidion mœstum, Lec. Proc. Ac. Phil. 1859, p. 80.

Hab. MEXICO.

7. **Hypermallus truncatus.**

Elaphidion truncatum, Haldeman, Trans. Am. Phil. Soc. x. p. 33.

Hab. MEXICO.

TRICHOPHORUS.

Six or seven species of *Trichophorus* are known, ranging from the banks of the La Plata to Honduras.

1. **Trichophorus decipiens.**

Elaphidio irrorato angustior et magis elongatus. Castaneus, nitidus, passim setosus tomentoque albo-cinereo maculatim vestitus; thorace oblongo, dorso callis elevatis politis, interstitiis punctulatis, tomento cinereo vittas laterales formante; elytris coriaceis et passim punctulatis, apice fere integris, juxta suturam leviter emarginatis.

Long. $9\frac{1}{2}$ lin.

Hab. HONDURAS, river Sarstoon (*Blancaneau*).

Resembles *Elaphidion irroratum*, and is liable to be mistaken for that species, from which it is readily distinguishable by the absence of spines at the apex of the elytra. The ashy-white patches of tomentum are also differently arranged, being scattered irregularly over the elytra (mostly on the sides), instead of being concentrated in large patches. The thorax has polished elevations on the sides as well as on the disk, the depressed interstices being minutely (instead of coarsely) punctured. A distinguishing character is the small size of the spines at the apex of the third to the fifth antennal joints. The nearly rounded apices of the elytra, the facies, and faintly impressed tibial carinæ are features which separate this species from all other known *Trichophori*. It seems, in fact, to connect *Trichophorus* with *Hypermallus*, and thus bridge over the differences between two of Lacordaire's *groupes*, viz. *Phoracanthides* and *Sphérionides*.

2. **Trichophorus albisparsus.** (Tab. IV. fig. 16.)

Trichophorus albisparsus, Bates, Trans. Ent. Soc. 1872, p. 175.

Hab. NICARAGUA, Chontales (*Belt*).

PERIBÆUM.

About a dozen species of the restricted genus *Peribœum* are known, all Tropical-American. The distinction from *Nephalius* is not very well-defined, consisting mainly in the thickened and pedunculate femora.

1. **Peribæum villosulum.** (Tab. III. fig. 16.)

Peribœum villosulum, Bates, Trans. Ent. Soc. 1872, p. 176.

Hab. NICARAGUA, Chontales (*Belt*).

2. **Peribæum bimaculatum.**

Peribœum bimaculatum, Bates, Trans. Ent. Soc. 1872, p. 176.

Hab. NICARAGUA, Chontales (*Belt*).

NEPHALIUS.

Also confined to Tropical America, and equally numerous in species with *Peribœum*.

1. **Nephalius suturalis.**

Nephalius suturalis, Pascoe, Ann. & Mag. Nat. Hist. ser. 3, xviii. p. 479.

Hab. MEXICO, Yucatan[1]; NICARAGUA, Chontales (*Belt*).—SOUTH AMERICA, Venezuela.

2. **Nephalius nigriventris.** (Tab. IV. fig. 2.)

Nephalius nigriventris, Bates, Trans. Ent. Soc. 1873, p. 220.

Hab. MEXICO; HONDURAS, river Sarstoon (*Blancaneau*); NICARAGUA, Chontales (*Belt*).

3. **Nephalius rutilus.** (Tab. IV. fig. 14.)

Nephalius rutilus, Bates, Trans. Ent. Soc. 1872, p. 177.

Hab. NICARAGUA, Chontales (*Belt*).

4. **Nephalius rugicollis.**

Sphærion rugicolle, Guérin, Icon. R. A. texte, p. 233[1].

Nephalius rugicollis, Bates, Trans. Ent. Soc. 1873, p. 177.

Hab. NICARAGUA, Chontales (*Belt*).—SOUTH AMERICA, Colombia[1].

5. **Nephalius xestioides.** (Tab. III. fig. 15.)

Nephalius xestioïdes, Bates, Trans. Ent. Soc. 1872, p. 177.

Hab. NICARAGUA, Chontales (*Belt*).

This species is remarkable for the extreme narrowness of the metathoracic episterna, which are covered by the lateral rim of the elytra, except for a small portion near their base. With this structural peculiarity are associated tightly-closed middle acetabula and a cylindrical smooth thorax. In these characters it approaches the genus *Aposphærion*, Bates (Trans. Ent. Soc. 1870, p. 275), from which it differs again by the obsolete grooves and carinæ of the antennæ, which in *Aposphærion* are very highly developed. The similarity of the sternal structure, however, seems to me to

outweigh the differences in the antennæ; and I would propose to include *Nephalius xestioides* in *Aposphærion*.

6. **Nephalius subpiceus.**

Sphærion subpiceum, White, Cat. Col. Long. B. M. i. p. 109.

Hab. HONDURAS (*Dyson*).

MALLOCERA.

Mallocera, Serv. Ann. Soc. Ent. Fr. 1833, p. 567.

The genus is here restricted to the species closely allied to Serville's type *M. glauca* of South Brazil. Lacordaire (Gen. des Col. viii. p. 320) introduced alien elements into it. In its restricted limits it comprehends only some half dozen species, all Tropical-American, of which the following only is known from so far north as Central America:—

1. **Mallocera spinicollis.** (Tab. IV. fig. 4.)

Mallocera spinicollis, Bates, Trans. Ent. Soc. 1872, p. 779.

Hab. NICARAGUA, Chontales (*Belt*).

PSYRASSA.

Psyrassa, Pascoe, Ann. & Mag. Nat. Hist. ser. 3, xviii. p. 481.

A genus limited to two or three species, inhabiting Central and North America. The spine of the third antennal joint is remarkably long; and this seems to be a good generic character. The carinæ of the antennæ are inconspicuous, being placed on the side of the joints, as viewed from above.

1. **Psyrassa basicornis.**

Psyrassa basicornis, Pascoe, loc. cit.

Hab. YUCATAN.

2. **Psyrassa castanea.**

Elongata, angusta, rufo-castanea, nitida, antennis pedibusque pallidioribus, pilis elongatis sparsis vestita; capite thoraceque sparsissime punctatis; elytris postice gradatim attenuatis, apice sinuatim truncatis angulis paullo productis sed non spinosis, subsparsim punctatis, apicem versus fere lævibus; antennis ♂ quam corpus paullo longioribus, ♀ multo brevioribus.

Long. $5\frac{1}{2}$–7 lin.

Hab. MEXICO, Almolonga (*Höge*).

More elongate than *P. basicornis*, and much more sparsely punctured, both on the thorax and on the basal portion of the elytra. The colour is uniform tawny-chestnut, with the antennæ, legs, and palpi paler. The angles of the elytral truncature are rather more produced than in *P. basicornis*, but are not spiniform as in *P. unicolor* (Haldem.), being broader or dentiform.

IRONEUS.

Ironeus, Bates, Trans. Ent. Soc. 1872, p. 178.

Two species, both from Central America, are known of this genus. The second, described below, will be seen to depart from the type in some of its characters.

1. **Ironeus duplex.** (Tab. IV. fig. 3.)

Ironeus duplex, Bates, loc. cit. p. 179.

Hab. NICARAGUA, Chontales (*Belt*).

2. **Ironeus pulcher.** (Tab. IV. fig. 13.)

Elongatus, modice convexus, niger, erecte pubescens, capite, thorace, scapo et femoribus rufis; elytris dense cano-tomentosis, utrinque lineis tribus nigris nitidis, quarum mediana latior.

Long. $5\frac{1}{2}$ lin.

Hab. NICARAGUA, Chontales (*Janson*).

Differs from *I. duplex* in the eyes being rather more prominent and more coarsely faceted. Although these differences are important, the close similarity of form in all other respects renders it unadvisable to separate the species generically. The antennæ in the male are very similar in length and structure to those of the same sex in *I. duplex*. The same may be said of the subcylindrical unarmed thorax, the dorsal surface of which is slightly uneven in both species, faintly transverse-strigose in *I. pulcher*, and marked with scattered punctures in *I. duplex*. The elytra differ greatly in being clothed with hoary tomentum, having the suture and three narrow vittæ on each side (the middle one broadest and elevated) naked and of the shining black colour of the integument; their apices are briefly truncated, with the external angle slightly produced. The legs are of the same proportions and structure, and of the same colour (*i. e.* black, with the femora red). The head, thorax above and beneath, and the antennal scape are bright red; the meso- and metasternum and abdomen are black.

MILTESTHUS.

Miltesthus, Bates, Trans. Ent. Soc. 1872, p. 177.

The following is the only known species:—

1. **Miltesthus marginatus.** (Tab. IV. fig. 1.)

Miltesthus marginatus, Bates, loc. cit. p. 178.

Hab. NICARAGUA, Chontales (*Belt, Janson*).

HARUSPEX.

Haruspex, Thoms. Syst. Céramb. p. 221.

Exclusively Tropical-American. Seven species have been described; but the following is the first recorded from Central America:—

1. **Haruspex chontalensis.** (Tab. 1V. fig. 12.)

Sublinearis, castaneo-rufus, supra opacus, pilis longis erectis vestitus; antennis quam corpus multo longioribus; elytris apice late truncatis, angulis exterioribus longe spinosis.
Long. 4 lin.

Hab. NICARAGUA, Chontales (*Janson*).

The head and thorax are darker than the rest of the body, and very coarsely but superficially subreticulate-punctate, the latter being cylindrical, with a broad transverse sulcus near the base. The elytra are nearly parallel-sided, broadly truncated at the apex, with the sutural angle rectangular and the external one produced into a long sharp spine; the surface is covered with large punctures arranged closely in rows. The legs are long, scarcely compressed, with strongly clavate femora. Beneath, the pro-, mesothorax, and anterior part of the metathorax are opaque, like the upper surface; but the posterior part of the metathorax, underside of the femora, and abdomen are highly polished.

HEXOPLON.

Hexoplon, Thoms. Syst. Céramb. p. 219.
Gnomidolon (partim), Lacord. Gen. Col. viii. p. 330.

Six or seven species of this elegant genus of Cerambycidæ are known, all Tropical-American. It is distinguished from *Gnomidolon* solely by the long spine at the internal apex of the middle tibiæ, a character which appears to be sufficiently constant to justify the retention of the genus.

1. **Hexoplon albipenne.** (Tab. IV. fig. 5.)

Hexoplon albipenne, Bates, Trans. Ent. Soc. 1872, p. 179.

Hab. NICARAGUA, Chontales (*Belt*).

OCTOPLON.

Octoplon, Thoms. Syst. Céramb. p. 218; Lacord. Gen. Col. viii. p. 331.
Ibidion (partim), White, Cat. Col. Long. B.M. ii. p. 222.

Also peculiar to Tropical America. Twenty-four species have been described.

1. **Octoplon glabriolum.** (Tab. IV. fig. 6.)

Octoplon glabriolum, Bates, Trans. Ent. Soc. 1872, p. 180.

Hab. NICARAGUA, Chontales (*Belt, Janson*).

IBIDION.

Ibidion, Serv. Ann. Soc. Ent. Fr. 1834, p. 103; Lacord. Gen. Col. viii. p. 331.

Eighty species of the restricted genus *Ibidion* are recorded in the Munich Catalogue. The range is a little more extended than that of *Hexoplon*, *Octoplon*, and other dismemberments of this very numerous and characteristic American group of Cerambycidæ,

some occurring in the Argentine Republic and as far south as Chili. The thighs are more abruptly clavate than in *Hexoplon* and *Octoplon*, and are unarmed at their apices. In many species the carinæ of the antennal joints and hind tibiæ are scarcely perceptible.

The habits of the *Ibidia* and allies are nocturnal, the perfect insects being found in the daytime motionless, on trees, generally concealed in the folds of leaves. They abound most in the scanty woodlands on the margins of campo and savanna districts, the continuous luxuriant forests of humid lowlands having fewer species. They are not, as a rule, widely distributed; and as each limited area throughout Tropical America has many peculiar to it, the number of species is prodigious, and the number of individuals relatively small. On this account, and owing to their recondite habits, they are not common in collections. Few, however, have hitherto been recorded from Central America.

1. **Ibidion griseicolle.** (Tab. IV. fig. 17.)

Ibidion griseicolle, Bates, Trans. Ent. Soc. Soc. 1872, p. 180.

Hab. NICARAGUA, Chontales (*Belt, Janson*).

2. **Ibidion carinicolle.** (Tab. IV. fig. 7.)

Ibidion carinicolle, Bates, loc. cit. p. 180.

Hab. NICARAGUA, Chontales (*Belt*).

3. **Ibidion nigrocinctum.** (Tab. IV. fig. 9.)

Heterachthes nigrocinctus, Bates, loc. cit. p. 182.

Hab. NICARAGUA, Chontales (*Belt*).

The absence of carinæ from the antennal joints and tibiæ brings this species within the definition of *Compsa*, § *Heterachthes*, according to Lacordaire's classification; but its great resemblance to the majority of the species of *Ibidion* forbid its separation from that genus.

4. **Ibidion ditelum.** (Tab. IV. fig. 10.)

Heterachthes ditelus, Bates, loc. cit. p. 181.

Hab. NICARAGUA, Chontales (*Belt*).

This species is also a *Heterachthes* according to Lacordaire's definition.

5. **Ibidion virgulatum.**

Lineare, melleo-flavum, nitidum, pilis longis erectis vestitum; elytris utrinque medio lineolis quatuor nigerrimis (anteriore retrorsum posteriore antrorsum obliquatis), interspatio flavo; antennis carinatis, articulo quarto brevissimo; thorace disco elevato, lævi, nudo; elytris politis, apice truncatis, angulo exteriore longe spinoso.

Long. 3 lin. ♂?

Hab. Guatemala, Zapote (*Champion*).

Almost identical in the peculiar markings of the elytra with *I. quadriguttatum* (White), which is a *Heterachthes* in its unridged antennal joints, whilst the present species has well-developed carinæ. The short, oblique, deep-black streaks of the elytra are rather closer together than in *I.* 4-*guttatum*, the anterior being a little before and the posterior a little behind the middle; they touch neither the lateral margin nor the suture, from which latter they are widely distant; and the anterior streak (directed obliquely backwards from the margin towards the suture) is rather more slanting than the posterior streak, which is directed a little forward from the margin towards the suture; both are margined with very pale yellow, as in *I.* 4-*guttatum*; and the space between the pair on each elytron is also pale yellow. The antennæ are very short for an *Ibidion*, if, as I suspect from the thickened third and fourth joints, the single specimen before me is a male.

6. **Ibidion exclamationis.**

Ibidion exclamationis, Thoms. Syst. Céramb. p. 201.

Hab. Mexico (*Boucard*), Almolonga (*Höge*).

The white "note-of-exclamation" spots on the elytra are often quite absent.

7. **Ibidion textile.**

Ibidion textile, Thoms. loc. cit. p. 573 [1].

Hab. Nicaragua, Chontales (*Belt*); Costa Rica [1].

8. **Ibidion mexicanum.** (Tab. IV. fig. 11.)

Ibidion mexicanum, Thoms. loc. cit. p. 573 [1].

Hab. Mexico [1]; Guatemala, near the city (*Salvin*, *Champion*).

This species was included in my paper (Trans. Ent. Soc. 1872) among the Longicornia of Chontales. On re-examination I doubt whether any of Mr. Belt's specimens can be justly referred to it, as, *inter alia*, they all far surpass the size ($9\frac{1}{2}$ millims.) given by M. Thomson in his diagnosis of *I. mexicanum*. The determination of the Guatemalan specimens is also doubtful.

9. **Ibidion cribripenne.**

Modice elongatum, castaneo-rufum, politum, breviter setosum, capite et thorace tenuiter sericeis, hoc relative brevi, disco depresso postice in tuberculum elevato; elytris apice obtuse breviter truncatis, grosse punctatis, medio castaneo-fuscis, fasciis duabus (versus suturam angustatis) pallidis; antennis (♀) filiformibus, haud carinatis; tibiis simplicibus.

Long. 5 lin. ♀.

Hab. Costa Rica, Cache (*Rogers*).

A *Heterachthes* according to Lacordaire's definition. In form and proportions of body, as well as in colour and markings, similar to *I. phoracanthoides* (White). It is, however, shorter; and the apices of the elytra are unarmed. The dark-brown colouring of the elytra occupies more than one half the surface, leaving the base (to a small extent) and a large apical area of the chestnut-red ground-colour. Across the dark-brown central area lie two broadish tawny-white slightly oblique belts, which are much broader towards the sides than towards the suture, which they nearly touch. The coarse but not very dense punctuation becomes obsolete near the apex.

10. **Ibidion obtusum.** (Tab. IV. fig. 8.)

Heterachthes obtusus, Bates, Trans. Ent. Soc. 1873, p. 221.

Hab. NICARAGUA, Chontales (*Belt*).

HETERACHTHES.

Heterachthes, Newm. Entom. p. 9.

The species strictly congeneric with *Heterachthes ebenus* of Newman are very few in number, and inhabit chiefly the warmer latitudes of North America and the West-India Islands.

1. **Heterachthes ebenus.**

Heterachthes ebenus, Newm. Entom. p. 9.

Hab. NORTH AMERICA, Florida, Texas.—NICARAGUA, Chontales (*Belt*).—SOUTH AMERICA, Venezuela.

I have carefully compared specimens taken by Mr. Belt with others sent by Mr. Belfrage from Texas, and found no difference of any importance between them. Venezuelan examples show a more distinct punctuation on the thorax.

ALCYOPIS.

Alcyopis, Pascoe, Ann. & Mag. Nat. Hist. ser. 3, xviii. 1866, p. 484.

Two species of this distinct genus are known—one from Brazil, and the following from Nicaragua:—

1. **Alcyopis chalcea.** (Tab. IV. fig. 18.)

Alcyopis chalcea, Bates, Trans. Ent. Soc. 1874, p. 221.

Hab. NICARAGUA, Chontales (*Belt*).

OBRIUM.

Obrium, Serv. Ann. Soc. Ent. Fr. 1834, p. 93.

About a dozen species of this curious genus of small Cerambycidæ are known. They occur both in North and South America, in Europe, and the islands of Tropical Asia. The species from continental Africa, recorded in the Munich catalogue as

belonging to the genus, are doubtful. *O. fuscatum*, Chevr., of West Africa, at any rate, is quite distinct from *Obrium*, forming the type of the genus *Ossibia*, Pasc. (=*Obriaccum*, Thoms. Typi Ceramb. p. 55).

1. **Obrium albifasciatum.**

Obrium albifasciatum, Bates, Trans. Ent. Soc. 1872, p. 182.

Hab. NICARAGUA, Chontales (*Belt*).

DISTENIA.

Distenia, Serv. Encyl. Méth. x. 1825, p. 485.

This genus, with several others very closely allied to it, was marked off by Lacordaire as a separate "Division" of Section B of the first "Cohorte" of Cérambycides, owing to a peculiarity in the insertion of the antennæ, which are placed more forward on the head, in front of the eyes and near the mandibles. This peculiarity is distinctive of the Prionidæ family, but is not observed in any of the Cerambycidæ, to which the *Distenicæ* belong in all other respects. It must be borne in mind, however, that a large number of the Lepturina show an approximation to this structure, and (what is of much importance in estimating the affinities of these difficult forms) great vacillation in the position of the antennæ. Since Lacordaire wrote, several aberrant forms of Lepturina which approach the *Distenicæ* in many respects have been discovered in Madagascar; and it is probable the views of Latreille and Serville were more correct, and that *Distenia* &c. are really allied to the Lepturina—in which case their position would be between the subfamily Cerambycinæ and the Lepturine group, where I now place them. The degree of coarseness in the faceting of the eyes is variable in the *Distenia* group, as it is in those genera of Lepturina to which the *Distenicæ* are nearest allied in other respects. In most of the large American species the eyes are coarsely faceted. In Lacordaire's system the *Distenicæ* were relegated to the end of the family, without any indication of their affinities.

The *Distenicæ* are widely distributed over the warmer parts of the globe; they are found in North and South America, Africa, India, the Malay archipelago, and Japan. None have yet been detected in Europe or Australia. They appear to be mostly nocturnal in their habits.

1. **Distenia pilatei.**

Distenia pilatei, Chevrolat, Rev. Zool. 1857, p. 104, pl. vi. f. 2.

Hab. NICARAGUA, Chontales (*Belt*, *Janson*).

2. **Distenia fimbriata.**

Distenia fimbriata, Lacord. Gen. Col. ix. p. 228, note.

Hab. GUATEMALA, Capetillo (*Champion*).

The single example sent home by Mr. Champion agrees very well with the description of Lacordaire, who was ignorant of the locality of the specimen he described. It appears to be only a local form of *D. pilatei*, varying from the type in the brassy polish of the glabrous stripe bordering the suture and the greater prominence of the thoracic tubercles.

3. **Distenia geniculata.** (Tab. VI. fig. 17.)

Distenia geniculata, Bates, Trans. Ent. Soc. 1872, p. 195.

Hab. NICARAGUA, Chontales (*Belt*).

4. **Distenia phæocera.** (*Distenia rufipes*, Tab. VI. fig. 16.)

Distenia rufipes, Bates, Trans. Ent. Soc. 1872, p. 196.

D. columbinæ (Serv.) affinis, viridi-ænea, nitida, brevissime setosa, pedibus rufis, antennis basi excepta fulvo-rufis; capite post oculos gradatim longe angustato; thorace disco valde inæquali sparsim rugoso-punctato, spinis lateralibus longis acutis; elytris apice angustis, unispinosis, angulo suturali distincto, supra alutaceis et confertim punctatis, striis punctatis autem utrinque tribus discoidalibus, apice sub-lævibus; antennarum scapo fortiter clavato, antice sulcato; femoribus paullulum incrassatis, haud spinosis.
Long. $7\frac{1}{2}$–10 lin.

Hab. NICARAGUA, Chontales (*Belt*, *Janson*).

The examination of further examples has justified the suspicion expressed in reviewing the Chontales Longicorns in 1872 (*loc. sup. cit.*), that this species is different from the *D. rufipes* of Colombia. The sculpture of the elytra is constantly different, the confused punctuation being closer and uninterrupted, except by the few lines of more regular punctures. The dull tawny-red colour of the antennæ (except the basal two joints and base of the third) is also a constant character.

5. **Distenia fastuosa.**

Distenia fastuosa, Pascoe, Ann. & Mag. Nat. Hist. ser. 4, viii. 1871, p. 274.

Hab. NICARAGUA, Chontales (*Belt*, *Janson*).—SOUTH AMERICA; COLOMBIA.

6. **Distenia lineatopora.**

Gracilis, carneo-fulva, griseo incumbenti-pubescens et parce breviter setosa, elytris plaga scutellari fasciisque duabus obliquis nigro-fuscis; thorace disco 5-tuberculato, spinis lateralibus conicis; elytris apice inermibus, subacutis, dorso punctis magnis in seriebus quatuor ordinatis; antennis pubescentibus, articulis a tertio apice fuscis, scapo longe clavato; femoribus modice incrassatis, apice inermibus, medio tibiisque apice fuscis; corpore subtus fusco-nebuloso.
Long. 7 lin. ♂.

Hab. GUATEMALA, Calderas (*Champion*).

A slender species, distinguished by its general tawny-pinkish hue and the four widely-separated lines of large punctures on the elytra, which gradually become less continuous in approaching the apex. The blackish-brown marks of the elytra are a

patch bordering the scutellum, an irregular oblique vitta before the middle (extending from the side downwards towards the suture), and a similar one behind the middle (slanting from the sides upwards), the two fasciæ being connected by a dusky sutural stripe. The tubercles of the thorax are very similar to those of the North-American *D. undata*.

7. **Distenia chrysostigma.**

Distenia chrysostigma, Bates, Trans. Ent. Soc. 1872, p. 196.

Hab. NICARAGUA, Chontales (*Belt*).

8. **Distenia nigrella.**

Nigra æneo tincta, longe setosa; thorace disco utrinque tumido, polito; elytris dimidio basali confertim grosse striato-punctatis, dimidio apicali lævibus, apice obtuse rotundatis; femoribus incrassatis, inermibus; antennis breviter pubescentibus, filiformibus, subrobustis.

Long. 5–6 lin.

Hab. GUATEMALA, Zapote (*Champion*).

Unicolorous, shining black, slightly bronzed, with rather long, brown, erect pubescence. The usual tubercles of the disk of thorax are not distinguishable, those on each side the dorsal line being blended in a large smooth elevation, and the elongated central one being obsolete; there are a few minute punctures only in the central depression; the lateral tubercles are well developed, conical, and acute. The elytra have more than their basal half thickly striate-punctate, the apical portion being quite smooth.

9. **Distenia vittata.**

Elongata, fusco-nigra, nitida, fulvo-pilosa, antennis (scapo excepto), pedibus (genibus exceptis) vittisque duabus utrinque elytrorum fulvis; capite mox pone oculos angustato, collo cylindrico; thorace tuberculis discoidalibus quinque lævibus paullulum elevatis, tuberculo laterali conico obtuso; elytris quam thorax duplo latioribus, versus apicem vix attenuatis, apice conjunctim rotundatis, supra dimidio basali subseriatim grosse punctatis, apicem versus irregulariter punctulatis; antennis (♀) quam corpus paullo brevioribus, breviter pubescentibus, scapo gradatim modice incrassato; tibiis anticis apice extus productis; coxis anticis valde exsertis; prosterni processu angustissimo.

Long. $9\frac{1}{2}$ lin. ♀.

Hab. GUATEMALA, Calderas (*Champion*).

In form and colours resembling certain Lepturina (e. g. *Oxymirus cursor*, *Acmæops longicornis*, Kirb.), to which family it makes some slight approach in its exserted anterior coxæ, which, however, have not the conical form of the Lepturina. The species is probably generically different from *Distenia*; but until both sexes are known it would be unsafe to found a genus upon it. The vittæ of the elytra are:—one continuous, parallel and very near the suture, diverging from it near the scutellum in the direction of the shoulders; and one marginal, interrupted and irregular in width, passing round the apex and joining the sutural stripe.

COMETES.

Cometes, Serville, Encyl. Méth. x. p. 485 (1825).

Distinguished from *Distenia* by the rather stouter antennæ, the joints of which are very thickly clothed beneath with excessively long silky hairs, adpressed in repose. Four or five species are known, all American, ranging from a little beyond the Tropics in South Brazil to Nicaragua.

1. **Cometes pulcherrimus.** (Tab. VI. fig. 18.)

Cometes pulcherrimus, Bates, Trans. Ent. Soc. 1872, p. 196.

Hab. NICARAGUA, Chontales (*Belt*).

Subfam. *CALLICHROMINÆ.*

Equally with the preceding subfamily Cerambycinæ, this group is here only provisionally adopted. It includes all those species of Cerambycidæ which have finely-faceted eyes—an assemblage even more numerous and diversified than its predecessor. Almost all the diurnal, gaily-coloured, and flower-frequenting species belong to this group.

GAUROTES.

Gaurotes, Leconte, Journal Acad. Phil. ser. 2, i. p. 324.

Eight species are known from the temperate latitudes of North America, Europe, and Asia. The two here described are the first recorded from the Tropics.

1. **Gaurotes donacioides.** (Tab. IV. fig. 23.)

Brevis, ænea, pilis brevibus cinereis vestita; thorace rotundato, antice subito valde angustato, crebre punctulato, linea dorsali lævi; elytris trigonis, quam thorax duplo latioribus, crebre punctulatis, basi convexis, apice truncatis, utrinque bispinosis; antennis nigris; corpore subtus fusco-æneo vix metallico.

Long. $4\frac{1}{2}$–$5\frac{1}{2}$ lin. ♂ ♀.

Hab. MEXICO, near the capital (*Flohr*).

A distinct species, allied to the North-American *G. cyanipennis* in the form of the thorax and the prominent mesosternal process; the thorax, however, is relatively broader behind and more strongly narrowed in front, and the mesosternal process is much more elevated and advanced. In its rather obscure brassy colour, sometimes inclining to greenish or slate-colour, and especially in the uniform and rather dense clothing of short ash-coloured hairs, it is very distinct from *G. cyanipennis*.

2. **Gaurotes ochropus.**

G. donacioidi proxime affinis, at differt pedibus antennisque fulvo-rufis. Æneo-fusca, pilis brevibus cinereis, subtus densius vestita; antennis (articulis basalibus fuscis exceptis), femoribus (genibus fuscis exceptis) tibiisque basi fulvo-rufis; thorace nitido, minus crebre punctato, linea dorsali lævi; elytris trigonis, apice truncatis, angulo suturali acuto, exteriore spinoso, dorso crebre punctulatis.

Long. $4\frac{1}{4}$ lin.

Hab. MEXICO (*Höge*).

Abundantly distinct from *G. donacioides*, independently of the colour of the legs and antennæ, by the less densely punctured and more shining surface of the head and thorax, by the less produced sutural angle of the elytral truncature, and by the more compact ashy pubescence of the under surface of the body.

LEPTURA.

Leptura, Linnæus, Syst. Nat. i. p. 397 (1758).

A numerous genus, highly characteristic of the faunas of north temperate latitudes and alpine zones in both the eastern and western hemispheres. About 170 species have been described; but none has hitherto been recorded from the southern hemisphere, or from so low a latitude in America as the following Mexican representative:—

1. **Leptura aliena.**

Elongata, præcipue elytris longis et parallelis, apice rotundatis; nigra, subtus nitida, supra sericeo-subopaca, dense breviter erecte pilosa; capite alveolato-punctato, genis paullo post oculos subangulatis ibique collo subito constricto; antennis filiformibus, subgracilibus; thorace ut in genere *Anoplodera* subcylindrico, postice vix dilatato angulis haud productis, lateribus modice rotundatis, dorso modice æqualiter convexo, punctulato; elytris elongatis et subplanatis, subtilissime discrete et æqualiter punctulatis.

Long. 5–7 lin.

Hab. Mexico, near the capital (*Flohr*).

A species distinct from all others by its general form (elongate, parallel-sided) and its facies (due to the dull sericeous elytra and their flattened surface). Its affinities seem to be in the direction of the genus *Anoplodera*, not admitted as distinct from *Leptura* by Lacordaire.

NEOLEPTURA.

Neoleptura, Thoms. Class. Long. p. 153; Lacord. Gen. Col. viii. p. 450.

The following is the only described species:—

1. **Neoleptura lecontei.**

Neoleptura lecontei, Thoms. Class. Long. p. 153.

Hab. Mexico.

OPHISTOMIS.

Ophistomis, Thoms. Archiv. Ent. i. p. 319; Lacord. Gen. Col. viii. p. 451.

According to Lacordaire this genus is restricted to Tropical America; but as its only constant distinguishing character rests on the long and narrow rostrum-like prolongation of the head, and this is exhibited to some extent by species of *Strangalia* from China and Japan, very much importance cannot be attached to this fact of geographical distribution. About fifteen species are known from Tropical America.

1. **Ophistomis picticornis.** (Tab. IV. fig. 21.)

Ophistomis picticornis, Bates, Trans. Ent. Soc. 1869, p. 384.

Hab. Nicaragua, Chontales (*Belt*, *Janson*).

2. **Ophistomis belti.** (Tab. IV. fig. 22.)

Ophistomis beltii, Bates, Trans. Ent. Soc. 1872, p. 182.

Hab. NICARAGUA, Chontales (*Belt*).

One example only is yet known of this species; the following nearly allied form, however, is clearly distinguishable from it:—

3. **Ophistomis emaciata.**

Angusta, gracilis, sparsim decumbenti-setosa; capite nigro; antennis nigris, articulis 6°–10ᵐ incrassatis flavis; thorace angusto, antice gradatim attenuato, dorso sparsim punctato, nigro nitido, macula basali vittaque lata laterali flavis, angulis posticis paullo productis; elytris flavis, sutura (pone scutellum latius) maculisque utrinque lateralibus versus basin nigris; corpore subtus, prosterno, metasterno lateribus ventreque apice nigris; pedibus piceis, tibiis femoribusque basi fulvis.

Long. 7 lin. ♀.

Hab. COSTA RICA (*Rogers*).

One example only, of the same sex as the specimen above mentioned of *O. belti.* Of slender form even for this genus, the thorax especially being very narrow and gradually tapering towards the head, strongly bisinuated at the base, with the posterior angles only moderately projecting. The antennæ are nearly of the same form and colour as in *O. picticornis* ♀; the fulvous-yellow colour, however, is more developed, extending from the tip of the fifth to the base of the tenth joints. The elytra are sparsely punctulated, very obliquely truncated at the apex, narrow between the shoulders, and gradually tapering behind; they are yellow, with the suture narrowly dusky, the dark colour expanding for a short space behind the scutellum; the other black spots are entirely marginal and near the base, the spots nearest the base being two in number, elongated, and side by side; a third spot lies a little before the middle of the elytra; the edge of the elytral epipleuræ also has a dusky line.

4. **Ophistomis rufiventris.** (Tab. IV. fig. 19.)

Ophistomis rufiventris, Bates, Trans. Ent. Soc. 1872, p. 183.

Hab. NICARAGUA, Chontales (*Belt*).—SOUTH AMERICA, Venezuela.

5. **Ophistomis lævicollis.**

Minus elongata, nigra, breviter setosa; thorace antice valde depresso, deinde postice convexo, impunctato, nitido, vittis tribus discoidalibus sanguineis; capite angusto, fronte lævi, epistomate grosse sparsim punctato, vertice crebre punctato; elytris elongato-trigonis, humeris latis, rectis, dorso planato, crebre punctato; corpore subtus, pedibus et antennis nigris, his (♀) longitudine corpori æqualibus, versus apicem sensim incrassatis.

Long. 5½ lin. ♀.

Hab. GUATEMALA, Capetillo (*Champion*).

Allied to *C. rostrata* (Bates) of Colombia, having the same remarkable form of the thorax, the dorsal surface of which rises abruptly from the anterior transverse

sulcus, giving it a gibbous appearance when viewed in profile. Both species agree also in the smoothness and opalescent gloss of the thoracic surface; its colour, however, is different, the red occupying the basal half in *O. rostrata*, and forming three longitudinal stripes in *O. lævicollis*. The base of the elytra is broad and straight, but oblique just before the angular shoulders. The epipleuræ are vertical and rather sharply separated from the plane dorsal surface.

6. **Ophistomis flavirostris.**

Gracilis, nigra, elytris parallelis griseo-setosis; capite infra, fronte, thorace angulis posticis femoribusque basi flavis; thorace campanuliformi, convexo, subtiliter ruguloso; elytris creberrime punctulatis, humeris vittula rufescente.

Long. $4\frac{1}{4}$ lin.

Hab. GUATEMALA, Zapote (*Champion*).

A small parallel-sided species, with ashy-pubescent elytra. In colours it resembles *O. albicollis* (Pascoe), from which it differs widely in form and sculpture. The crown and occiput behind, and the mouth and its borders in front, are black; all the rest of the head is bright yellow. The antennæ are black. The thorax is wide behind and narrowed in curved lines to the anterior sulcus, the surface being a little less convex than in *O. lævicollis*, minutely sculptured, and opaque; the yellow colour at the posterior angles forms a large spot reaching halfway up the side and on the flank of the thorax. The elytra are very closely punctured, and have a faint reddish streak proceeding from each shoulder. The underside of the body is ashy black, the legs black, with the basal halves of the femora and the base of the four hinder tarsi yellow.

7. **Ophistomis nigella.** (Tab. IV. fig. 20.)

Ophistomis nigellus, Bates, Trans. Ent. Soc. 1872, p. 233.

Hab. NICARAGUA, Chontales (*Belt*).

8. **Ophistomis pallida.** (Tab. V. fig. 2.)

Ophistomis pallida, Bates, Trans. Ent. Soc. 1872, p. 183.

Hab. NICARAGUA, Chontales (*Belt*).

CHONTALIA.

Chontalia, Bates, Trans. Ent. Soc. 1872, p. 233.

One species only of this pretty genus of the Lepturine group has yet been discovered.

1. **Chontalia cyanicollis.** (Tab. V. fig. 3.)

Chontalia cyanicollis, Bates, Trans. Ent. Soc. 1872, p. 233.

Hab. NICARAGUA, Chontales (*Belt*).

Only one example is at present known.

RHATHYMOSCELIS.

Rhathymoscelis, Thomson, Class. Long. p. 161.

The following is the only species described of this genus, and is unknown to me:—

1. **Rhathymoscelis haldemani.**

Rhathymoscelis Haldemanii, Thoms. Class. Long. p. 9.

Hab. MEXICO (*Sallé*).

OXYCOLEUS.

Oxycoleus, Lacordaire, Gen. Col. viii. p. 484.

A curious genus of the *Molorchina* group, with abbreviated triangular elytra. It is allied to the European and North-American *Callimoxys*, and is scarcely distinguishable from *Merioneda* (Pascoe) of the Malay Archipelago and Malacca. *Stenoptrellus* (Bates) from the Amazons, published a year after *Oxycoleus*, is evidently congeneric.

1. **Oxycoleus clavipes.**

Oxycoleus clavipes, Lacordaire, Gen. Col. viii. p. 485, note; Atlas, pl. 90. f. 5.

Hab. MEXICO, Oaxaca.

RHINOTRAGUS.

Rhinotragus, Germar, Ins. Spec. Nov. p. 513.

Three or four species of true *Rhinotragi* have been described, all from Tropical South America. The following is the first made known from Central America; and it is curious that it resembles closely a South-Brazilian species.

1. **Rhinotragus longicollis.**

Rhinotragus apicalis, Bates, Trans. Ent. Soc. 1872, p. 183 (nec Guérin).

Modice elongatus, glaber, flavus, partibus oris, antennis, lineolis duabus discoidalibus thoracis, apiceque elytrorum nigris; antennis pedibusque nigris, femoribus annulo fulvo; corpore subtus flavo, metasterno postice abdominisque segmentis tribus medianis nigro-fasciatis; thorace subelongato, medio vix rotundato, antice angustato posticeque vix strangulato, supra grosse punctato, callis tribus lævibus; elytris parallelis, planis, apice truncatis angulisque acutis, grosse crebre punctatis.

Long. 6 lin.

Hab. NICARAGUA, Chontales (*Belt*).

Although agreeing with Guérin's description of his *R. apicalis*, from Bolivia, as far as it goes, I doubt the probability of this being the same as his species, as Guérin makes no allusion to the distinguishing character afforded by the elongated and rather narrow thorax. The above description will suffice to distinguish *R. longicollis* from *R. dorsiger*, and probably from *R. apicalis*, if, as I suspect, the thorax is of similar form in these two southern species.

OMMATA.

Ommata, White, Cat. Long. Col. B. M. ii. p. 194; Lacord, Gen. Col. viii. p. 502; Bates, Ann. & Mag. Nat. Hist. vol. xi. 1873, p. 26.

Thirty-five species of this exclusively Tropical-American genus have been described. The range is from the province of Paraná (a little outside the southern tropic) to the *tierras calientes* of Mexico; but none have yet been recorded from the West Indies.

1. **Ommata beltiana.** (Tab. V. fig. 7.)

Ommata Beltiana, Bates, Trans. Ent. Soc. 1872, p. 184.

Hab. NICARAGUA, Chontales (*Belt*).

2. **Ommata cyanipennis.** (Tab. V. fig. 5.)

Ommata cyanipennis, Bates, Trans. Ent. Soc. 1872, p. 184.

Hab. NICARAGUA, Chontales (*Belt*).

3. **Ommata ægrota.**

Odontocera ægrota, Bates, Trans. Ent. Soc. 1872, p. 183.

Ommata ægrota, Bates, Ann. & Mag. Nat. Hist. vol. xi. 1873, p. 35.

Hab. NICARAGUA, Chontales (*Belt*).

4. **Ommata championella.**

Elongata, linearis, nigra, abdomine sanguineo, elytris utrinque vitta abbreviata basali, femoribusque basi flavis; thorace cylindrico, crebre alveolato-punctato; elytris abdominis apicem fere attingentibus, apice recte truncatis, juxta marginem tenuiter carinatis, dorso crebre punctatis; pedibus gracilibus, femoribus clavatis; antennis dimidium corporis attingentibus, apicem versus incrassatis, nigris.

Long. $4\frac{1}{2}$ lin.

Hab. GUATEMALA, Calderas (*Champion*).

Belongs to the subgenus *Eclipta* of the monograph of Rhinotraginæ (Ann. & Mag. Nat. Hist. vol. xi. 1873, p. 29), and allied to *O. prolixa.* The general form is remarkably elongate and narrow, and bears much resemblance to that of *Odontocera gracilis* (Klug), with which the species agrees in colours and markings. The absence of vitreous spaces on the elytra (a distinguishing character of the genus *Odontocera*), the smaller size of the insect, and the uniform reticulate-punctate surface of the cylindrical thorax at once enable it to be recognized.

ODONTOCERA.

Odontocera, Serville, Ann. Soc. Ent. Fr. 1833, p. 546.

About thirty species of this elegant genus are known, all Tropical-American.

1. **Odontocera monostigma.** (Tab. V. fig. 6.)

Agaone monostigma, Bates, Trans. Ent. Soc. 1869, p. 384.
Odontocera monostigma, Bates, Ann. & Mag. Nat. Hist. xi. 1873, p. 38.

Hab. NICARAGUA, Chontales (*Belt*).

2. **Odontocera clara.** (Tab. V. fig. 4.)

Odontocera clara, Bates, Ann. & Mag. Nat. Hist. xi. 1873, p. 38.

Hab. NICARAGUA, Chontales (*Bates*).

3. **Odontocera aurocincta.**

Odontocera aurocincta, Bates, Ann. & Mag. Nat. Hist. xi. 1873, p. 42.

Hab. MEXICO, Tehuantepec (*Sumichrast*); Plan del Rio (*Höge*).

4. **Odontocera rugicollis.**

O. bisulcatæ primo intuitu similis, at differt inter alia femoribus posticis subito clavatis. Nigra; thorace fere cylindrico, dorso sulcis duabus haud profundis longitudinalibus, omnino grosse medio transversim rugulose punctato, disco rufo-castaneo; antennis brevibus, robustis, nigris; elytris modice abbreviatis, a medio dehiscentibus, apicem versus extrorsum paullo curvatis apice ipso obtuse truncatis, marginibus utrinque nigris punctatis, vitta mediana alba a basi usque ad apicem vitrea; corpore subtus nigro, episternis rufo-castaneis; pedibus nigris, femoribus tibiisque posticis basi albis, tibiis apicem versus paullulum sensim dilatatis extus nigro-pilosis.

Long. $6\frac{1}{2}$ lin.

Hab. GUATEMALA, Zapote (*Champion*).

Much less elongated than *O. sanguinolenta*, and similar in form and colours to *O. bisulcata*; but distinguished from both by the abruptly clavate hind femora, which are nearly of the same form (relatively shorter) as in *O. gracilis*. Each elytron forms, after the middle, a linear parallel-sided blade, slightly flexuous, the two blades being more distant from each other near the middle than at the apex.

ACYPHODERES.

Acyphoderes, Serville, Ann. Soc. Ent. Fr. 1833, p. 549.

About a dozen species of *Acyphoderes* are known, having a similar distribution to the *Odontoceræ* and *Ommatæ*.

1. **Acyphoderes acutipennis.**

Acyphoderes acutipennis, Thoms. Class. Long. p. 179.

Hab. MEXICO.

2. **Acyphoderes vespiventris.**

Angustus, gracilis, nigro-chalybeus, antennis tibiis et tarsis piceis, partibus oris fulvo-rufis, elytris chalybeo-violaceis politis; thorace antice dilatato, dorso convexo postice trinodoso, alveolato-punctato, argenteo-piloso; scutello argenteo; elytris abdomine paullo brevioribus, angustis, fere linearibus, apice breviter truncatis, humeris elevatis, basi et apice aspere punctatis; antennis dimidiam corporis longitudinem fere

attingentibus, articulo tertio modice elongato, 5°–10^{m} serratis; corpore subtus pedibusque pilosis, crebre punctulatis; abdomine maxime petiolato; femoribus abrupte clavatis.

Long. 8 lin. ♂.

Hab. GUATEMALA, San Gerónimo (*Champion*).

In many respects agreeing with the genus *Sphecomorpha*; but the femora, being abruptly instead of gradually clavate, point to a nearer relationship with *Acyphoderes*, from which it differs in the convex thorax.

PHESPIA.

Phespia, Bates, Ann. & Mag. Nat. Hist. xi. 1873, p. 127.

Three species only are known of this curious mimetic genus of the Rhinotragina, Tropical-American like the rest of the group.

1. **Phespia corinna.**

Charis corinna, Pascoe, Trans. Ent. Soc. ser. 3, vol. v. p. 290[1].

Phespia corinna, Bates, Ann. & Mag. Nat. Hist. xi. 1873, p. 128.

Hab. NICARAGUA, Chontales (*Belt*).—South America, COLOMBIA[1].

TOMOPTERUS.

Tomopterus, Serville, Ann. Soc. Ent. Fr. 1833, p. 544.

Seven species have been described, all Tropical-American.

1. **Tomopterus vespoides.**

Tomopterus vespoides, White, Cat. Long. Col. B. M. ii. p. 176, pl. v. f. 8.

Hab. GUATEMALA (*Deby*).

STENOPSEUSTES.

Stenopseustes, Bates, Ann. & Mag. Nat. Hist. xi. 1873, p. 131.

Only one species of this genus, from Paraná in South Brazil, has previously been described. The following is perfectly congeneric with it:—

1. **Stenopseustes sericinus.**

Elongatus, omnino sericeo-pubescens, fulvus, thorace antennisque obscurioribus; capite opaco, occipite fusco, rostro melleo-flavo; thorace cylindrico, dorso longitudinater carinato, sericeo-opaco, limbo argenteo; elytris brevibus, subvitreis, marginibus anguste punctulatis, basi sericeo-auratis.

Long. 7 lin. ♀.

Hab. MEXICO (*Hegewitsch*).

Rather larger and more robust than *S. æger* (the described example of which is a male), and differing from it by the smooth, glassy surface of the disks of the elytra, which are also relatively narrower and somewhat dehiscent after the middle. In these characters the species points to the relationship of the genus with *Odontocera*, which in *S. æger* was not indicated. The structure of the antennæ and the atrophy of the prosternal process afford abundant characters for the distinction of the genus, which is, besides, totally different from *Odontocera* in facies.

TETHLIMMENA.

Tethlimmena, Bates, Trans. Ent. Soc. 1872, p. 185.

One species only is known of this curious genus of small Cerambycidæ, the nearest allies of which appear to be *Pyrocalymma*, an Indian, and *Chaodalis*, an Australian form.

1. **Tethlimmena aliena.** (Tab. V. fig. 1.)

Tethlimmena aliena, Bates, loc. cit. p. 185.

Hab. NICARAGUA, Chontales (*Belt*).

CALLICHROMA.

Callichroma, Latreille, Règne Anim. ed. 1, ii. p. 341; Serville, Ann. Soc. Ent. Fr. 1833, p. 557; Lacordaire, Gen. Col. ix. p. 15.

As restricted by Serville and Lacordaire this fine genus includes only American and African species. In all the hind femora are linear and simple, *i. e.* free from notch or prominence beneath. The only definite character which I can discover separating it from the Europæo-Asiatic *Aromia* (which includes the common musk-beetle of the British Islands) is the clavate and pedunculate middle femora. The numerous group *Chloridolum*, abundant in Tropical Asia and its islands, approaches it in this respect; but *Chloridolum* is marked off as a distinct group by the more slender form of the species and the proportions of the second and third antennal joints, the two being about equal in length, whilst in *Callichroma* the third is constantly the longer. About fifty species are known, twenty of which are West- and South-African.

The American species are sometimes found very abundantly on flowers.

1. **Callichroma plicata.**

Callichroma plicatum, Leconte, Proc. Ac. Phil. vi. 1853, p. 233[1].

Hab. North America, TEXAS[1].—MEXICO, Sonora.

A specimen which I received some years ago in a collection from Sonora is larger than the Texan example I have seen.

2. **Callichroma xanthogastra.** (Tab. V. fig. 11.)

Callichroma columbinum, Bates, Trans. Ent. Soc. 1872, p. 186 (nec Guérin).

Viridi-aurata, subtiliter velutina, abdomine femoribusque rufis, antennis, tibiis et tarsis nigris; capite subconfluenter punctato; thorace disco haud striato, subtiliter punctulato, subnitido; elytris alutaceis unicoloribus; tibiis posticis minus quam in *C. holochlora* dilatato-compressis.

Long. 13 lin. ♀.

Hab. NICARAGUA, Chontales (*Belt*).

Similar in colour but less brilliant than *C. plicata*, and disk of thorax free from the strong transverse ridges which exist in that species. The elytra are sculptured and clothed nearly as in *C. sapphira* and *C. holochlora*, differing from both in their golden-green colour. Mr. Belt obtained only one example, which was entered in the "Longicorn Coleoptera from Chontales" as *C. columbinum*, Guér., from which it is certainly distinct.

3. **Callichroma sapphira.**

Callichroma sapphira, Bates, Cistula Entomologica, ii. p. 402 (1879).

Hab. Mexico.

4. **Callichroma holochlora.** (Tab. V. fig. 9.)

Callichroma holochlora, Bates, Trans. Ent. Soc. 1872, p. 185.

Hab. Guatemala, Zapote (*Champion*); Nicaragua, Chontales (*Belt*, *Janson*); Costa Rica (*Von Patten*).

5. **Callichroma chiriquina.**

Callichroma chiriquina, Bates, Cistula Entomologica, ii. p. 402 (1879).

Hab. Panama, Chiriqui.

6. **Callichroma opipara.**

Callichroma opiparum, Bates, Trans. Ent. Soc. 1873, p. 222.

Hab. Nicaragua, Javali (*Seemann*).

7. **Callichroma melancholica.**

Callichroma melancholicum, Bates, Trans. Ent. Soc. 1872, p. 186.

Hab. Mexico.

8. **Callichroma cyanomelas.** (Tab. V. fig. 10.)

Callichroma cyanomelas, White, Cat. Col. Long. B. M. i. 158[1].

Hab. Guatemala [1]; Nicaragua, Chontales (*Belt*, *Janson*).

9. **Callichroma cosmica.** (Tab. V. fig. 8.)

Callichroma cosmicum, White, Cat. Col. Long. B. M. i. p. 158[1]; Bates, Trans. Ent. Soc. 1872, p. 186[2].

Hab. Honduras [1]; Nicaragua, Chontales (*Belt* [2], *Janson*).

10. **Callichroma aureotincta.**

Callichroma aureotinctum, Bates, Trans. Ent. Soc. 1870, p. 335[1].

Hab. Panama.—South America, R. Amazons [1].

In addition to the characters mentioned in the above-cited description as distinguishing this species from *C. nigricollis*, may be adduced the larger and more conical lateral spines of the thorax. The golden tinge of the apex of the elytra is not constant.

11. **Callichroma rugicollis.**

Callichroma rugicollis, Guér. Icon. R. A. texte, iii. p. 220[1].

Callichroma assimilatum, White, Cat. Col. Long. B. M. i. p. 158[2].

Callichroma scitulum, Pascoe, Trans. Ent. Soc. 3rd ser. v. p. 292[3].

Hab. Mexico [1]; Honduras, river Sarstoon (*Blancaneaux*); Guatemala, Zapote (*Champion*).—South America, Colombia [3], Cayenne, Amazons, Brazil [2].

COREMIA*.

Coremia, Serville, Ann. Soc. Ent. Fr. 1834, p. 22.

Three species are recorded from Tropical South America, one of which is found to extend its range to Central America.

1. **Coremia hirtipes.**

Saperda hirtipes, Oliv. Ent. no. 68, p. 14, t. 1. f. 8[1].
Coremia hirtipes, Guér. Icon. Règne Anim. t. 44. f. 3 *b*[2]; Bates, Trans. Ent. Soc. 1872, p. 186[3].

Hab. NICARAGUA, Chontales (*Belt*[3]).—SOUTH AMERICA, Cayenne[1], Amazons.

Nicaraguan examples agree perfectly with those from the Amazons, but they are a little more robust and of a darker general tint.

CYLLENE.

Cyllene, Newman, Entom. p. 7 (1840).
Clytus, Serville, Laporte & Gory, White.

This well-marked group of the cosmopolitan *Clytini* comprises upwards of twenty species, all American, ranging from Buenos Ayres to California and Canada, but most numerous in the tropical zone.

1. **Cyllene erythropus.**

Clytus erythropus, Chevr. Col. du Mexique, Cent. i. fasc. 4. no. 1 (1835); Laporte & Gory, Mon. Clyt. p. 4, t. 2. f. 1.
Clytus variegatus, Laporte & Gory, Mon. Clyt. t. 2. f. 4.
Cyllene erythropus, Chevr. Ann. Soc. Ent. Fr. 1860, p. 458.

Hab. MEXICO, Jalapa (*Höge*); GUATEMALA, Capetillo (*Champion*).

2. **Cyllene guttata.**

Cyllene guttatus, Chevr. Ann. Soc. Ent. Fr. 1860, p. 459[1]; Bates, Trans. Ent. Soc. 1872, p. 186[2].

Hab. MEXICO, Cordova (*Sallé*)[1]; NICARAGUA, Chontales (*Belt*[2], *Janson*); COSTA RICA, Irazu (*Rogers*).

3. **Cyllene crinicornis.**

Cyllene crinicornis, Chevr. Ann. Soc. Ent. Fr. 1860, p. 460[1].

Hab. MEXICO, Granada, Vera Cruz[1]; HONDURAS, river Sarstoon (*Blancaneaux*).

4. **Cyllene mexicana.**

Clytus mexicanus, Laporte & Gory, Mon. Clyt. p. 3, t. 2. f. 6.

Hab. MEXICO.

* *Ethemon lepidum,* recorded in the Munich Catalogue as from Mexico, is a South-Brazilian insect.

5. **Cyllene costaricensis.**

Clytus costaricensis, Thoms. Class. Céramb. p. 218.

Hab. Costa Rica.

6. **Cyllene cayennensis.**

Clytus cayennensis, Laporte & Gory, Mon. Clyt. p. 10, t. 3. f. 9[1]; Bates, Trans. Ent. Soc. 1872, p. 186[2].

Hab. Nicaragua, Chontales (*Belt*[2], *Janson*).—South America, Cayenne[1].

Compared with an example from Cayenne, the numerous specimens taken by Mr. Belt and Mr. Janson show no important difference. This is the more remarkable, as in Venezuela, and again on the Amazons, the species has become modified into well-marked local forms.

TRICHOXYS.

Clytus (division *Trichoxys*), Chevrolat, Ann. Soc. Ent. Fr. 1860, p. 454.
Clytus (partim), Lap. & Gory, White.

Fourteen species, all Mexican, are included by Chevrolat in this genus. It is doubtful, however, if they all really belong to it; *T. hartwegi* at any rate must be separated, as it agrees neither in facies nor structure with the typical species. *Trichoxys* differs structurally from *Clytus*, as restricted by Chevrolat and Lacordaire (Gen. Col. ix. p. 67), in the depressed suture and longitudinal carinæ of the elytra, the prominence and vertical front edge of the mesosternum, and the stronger bristles of the basal joints of the antennæ. In their general form and markings, moreover, the species are very different both from *Clytus* and all other genera of the group, and form a natural assemblage of forms, to which their circumscribed area of distribution gives additional definiteness. In *T. hartwegi* the third to sixth antennal joints have a strong spine at the apex. This alone is perhaps not a sufficient warrant for generic separation, unless we are prepared to treat *Cyllene nebulosa* and *antennata* in like manner, which differ from all the other species at present included in the same genus by their spinose antennæ. But *Trichoxys hartwegi* differs also in the form of the antennæ and in that of the thorax and legs, especially the femora.

1. **Trichoxys bilineatus.**

Clytus (*Trichoxys*) *bilineatus,* Chevr. Ann. Soc. Ent. Fr. 1860, p. 461, t. 9. f. 1[1].

Hab. Mexico, Oaxaca[1].

2. **Trichoxys pellitus.**

Clytus pellitus, White, Cat. Col. Long. B. M. ii. p. 272[1].
Clytus (*Trichoxys*) *pellitus,* Chevr. Ann. Soc. Ent. Fr. 1860, p. 462.

Hab. Mexico, Oaxaca (*Hartweg*)[1].

3. Trichoxys labyrinthicus.

Clytus (*Trichoxys*) *labyrinthicus*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 463, t. 9. f. 2[1].

Hab. MEXICO, Oaxaca (*Boucard* [1]).

4. Trichoxys apelles.

Clytus apelles, Newm. Ent. Mag. v. p. 394.
Clytus (*Trichoxys*) *apelles*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 464.

Hab. MEXICO.

5. Trichoxys viridicollis.

Clytus (*Trichoxys*) *viridicollis*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 464[1].

Hab. GUATEMALA [1], San Geronimo (*Champion*).

6. Trichoxys vitticollis.

Clytus vitticollis, Lap. & Gory, Mon. Clyt. p. 7, t. 2. f. 5.
Clytus (*Trichoxys*) *vitticollis*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 465.

Hab. MEXICO.

7. Trichoxys fortunatus.

Clytus (*Trichoxys*) *fortunatus*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 465, t. 9. f. 3[1].

Hab. MEXICO, Oaxaca [1].

8. Trichoxys hirtellus.

Clytus (*Trichoxys*) *hirtellus*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 467[1].

Hab. NORTH AMERICA, California [1].—MEXICO, Western Provinces [1].

9. Trichoxys rubripes.

Clytus rubripes, White, Cat. Col. Long. B. M. ii. p. 273.

Hab. MEXICO, Oaxaca.

According to Mr. C. O. Waterhouse, closely allied to *T. hirtellus*.

10. Trichoxys melanotelus.

Clytus melanotelus, White, Cat. Col. Long. B. M. ii. p. 273[1]; Waterh. Pr. Ent. Soc. 1874, p. xxviii[2].
Clytus (*Trichoxys*) *melanotelus*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 468.
Clytus (*Trichoxys*) *flexus*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 468[3].

Hab. MEXICO (*Glennie* [1]),-western provinces [3].

The above synonymy was established by Mr. C. O. Waterhouse [2].

11. **Trichoxys atripes.**

Clytus (*Trichoxys*) *atripes*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 469[1].

Hab. Mexico (*Truqui*)[1].

12. **Trichoxys sulphurifer.**

Clytus (*Trichoxys*) *sulphurifer*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 470, t. 9. f. 4[1].

Hab. Mexico[1], near the capital (*Flohr*).

13. **Trichoxys westwoodi.**

Clytus (*Trichoxys*) *westwoodii*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 471[1].

Hab. Mexico, Oaxaca[1].

14. **Trichoxys abbreviatus.**

In hoc genere brevis, niger, viridi-incumbentipubescens, elytris utrinque fasciis indistinctis, a latere versus discum extensis, dubus vel tribus pallidioribus, interspatiis duobus nigris; ventre nigro utrinque maculis magnis quatuor viridi-pubescentibus; tibiis et tarsis rufis; thorace fere orbiculari; elytris carinis fortibus, utrinque in spinam apicalem desinentibus; mesosterno prominente, antice verticali.

Long. 6 lin.

Hab. Guatemala, Purula (*Champion*).

15. **Trichoxys tricolor.**

Clytus tricolor, Chevr. Col. du Mexique, 1re cent. fasc. 4; Lap. & Gory, Mon. Clyt. p. 89, t. 16. f. 103.

Clytus (*Anthoboscus*) *tricolor*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 483[1].

Hab. Mexico, Cordova, Vera Cruz[1]; Guatemala, San Gerónimo (*Champion*).

This pretty little species is especially ill-placed in *Anthoboscus* (=*Clytanthus*), to which Chevrolat referred it. The depressed sutural area of the elytra, bounded by a longitudinal carina, shows that its position is near *Cyllene* or *Trichoxys*. In colours it has no resemblance to any other species, except perhaps *Cyllene chara* of Say. The mesosternum, although not prominent and vertical, as in the typical *Trichoxys*, is decidedly convex. It may be regarded as an aberrant or degraded form of this genus.

16. **Trichoxys (?) hartwegi.**

Clytus Hartwegii, White, Cat. Long. Col. B. M. ii. p. 252, t. 6. f. 8[1].

Clytus (*Trichoxys*) *Hartwegii*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 466[2].

Hab. Mexico[1], Oaxaca and Guanaxuato[2].

OCHRESTHES.

Clytus (div. *Ochraethes**), Chevr. Ann. Soc. Ent. Fr. 1860, p. 454.

Clytus (*Ochroesthes*), Chevr. ibid. p. 472 *et seq.*

Ochrestes, Lacord. Gen. Col. ix. p. 65.

Like *Trichoxys* an exclusively Mexican and North Central-American genus, comprising

* Derived by the author from ὤχρα and ἐσθής.

an assemblage of species closely allied to *Clytus*, but differing in style of markings and colours and in the carinated elytra. The mesosternum is in some species distinctly prominent; and in such cases there is very little distinction from *Trichoxys*; thus *Ochresthes z-littera* is very closely allied to *Trichoxys sulphurifer*. With *Clytus* the genus is connected through such species as *Clytus scalaris*.

Eleven species are known.

1. Ochresthes circuliferus.

Clytus (*Ochroesthes*) *circuliferus*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 472.

Hab. Mexico.

2. Ochresthes obliquus.

Clytus (*Ochroesthes*) *obliquus*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 473[1].

Hab. Mexico (*Sallé*[1]).

3. Ochresthes sommeri.

Clytus sommeri, Chevr. Col. du Mexique, 1re cent. fasc. 4; Lap. & Gory, Mon. Clyt. p. 72, t. 14. f. 83, ♀.
Clytus tibialis, Lap. & Gory, Mon. Clyt. p. 71, t. 13. f. 83, ♂.
Clytus (*Ochroesthes*) *sommeri*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 474[1].

Hab. Mexico, near the city [1].

4. Ochresthes citrinus.

Clytus (*Ochroesthes*) *citrinus*, Chev. Ann. Soc. Ent. Fr. 1860, p. 474.

Hab. Mexico.

5. Ochresthes pollinosus.

Clytus pollinosus, Chevr. Col. du Mexique, 1re cent. fasc. 4; Lap. & Gory, Mon. Clyt. p. 73, t. 13. f. 82 (figura vitiosa).
Clytus (*Ochroesthes*) *pollinosus*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 476[1].

Hab. Mexico, Cordova, Orizaba[1]; Guatemala, San Gerónimo, El Jicaro (*Champion*); Costa Rica, river Sucio, Caché (*Rogers*).

The Costa-Rican examples differ from those of Mexico and Guatemala in the external angle of the truncated apex of the elytra being a little more prolonged and pointed.

6. Ochresthes z-littera.

Clytus (*Ochroesthes*) *z-littera*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 476[1].

Hab. Mexico, Orizaba[1] (*Boucard*), Jalapa (*Höge*).

7. Ochresthes cristoforii.

Clytus (*Ochroesthes*) *cristoforii*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 477.

Hab. Mexico.

8. Ochresthes tomentosus.

Clytus (*Ochroesthes*) *tomentosus*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 479.

Hab. Mexico (*Boucard*).

9. Ochresthes viridiventris.

Clytus (*Ochroesthes*) *viridiventris*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 479[1].

Hab. Mexico, Istepec (*Sallé*) [1].

10. Ochresthes brevicornis.

Clytus (*Ochroesthes*) *brevicornis*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 480.

Hab. Mexico (*Truqui*).

11. Ochresthes virescens.

Clytus (*Ochroesthes*) *virescens*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 481.

Hab. Mexico (*Truqui*).

12. Ochresthes picticornis.

Modice elongatus, postice valde attenuatus, niger cinereo-pubescens; antennis articulis 1° et 2°–6^m^ basi pedibusque (tarsis exceptis) rufis; elytris utrinque plaga elongata, usque ultra medium extensa, fulva, maculaque suturali versus apicem cinerea, disco obtuse carinatis, apice juxta suturam brevissime oblique truncatis; mesosterno convexo; thorace orbiculari, basi constricto.

Long. 7 lin. ♀.

Hab. Guatemala, Capetillo (*Champion*).

Distinct in its coloration from all other known species. The head and thorax and the underside of the body are blackish, closely covered with incumbent ash-coloured pubescence. The antennæ are glabrous and shining, black, with the scape and base of several succeeding joints red, their under surface furnished with the usual stiff bristles. The thorax is nearly globular, but strongly constricted at the base. The elytra are elongate-trigonal, with the usual depressed suture, bounded by a longitudinal carina on each side, the apex being simply angular and not spinose; the apical third of the surface, suture, and lateral margins are blackish, the rest of the surface reddish tawny, the dusky suture widening near the scutellum, and a small pale ashy spot lying near the suture on each side a little before the apex. The legs, with the exception of the tarsi, are bright red. The mesosternum is very convex, but not vertical in front as in *Trichoxys*. The antennæ (♀) are of equal thickness to the apex, and about two thirds the length of the body. The hind femora are short and gradually thickened.

13. Ochresthes palmeri.

Parvus, modice elongatus, postice vix angustatus, niger, antennis pedibusque tenuiter cinereo-pubescentibus, corpore supra breviter flavo-olivaceo pubescente, subtus grisescente; thorace lateribus æqualiter modice rotundatis; elytris absque carinis, apice singulatim rotundatis; antennis filiformibus apicem versus haud incrassatis.

Long. 5 lin. ♂ ♀.

Hab. Mexico, San Luis Potosi (*Dr. Palmer*).

DEXITHEA.

Dexithea, Thomson, Syst. Céramb. p. 185 ; Lacord. Gen. Long. ix. p. 65.

A genus well characterized by Lacordaire as being intermediate in its essential features between *Trichoxys* and *Plagionotus*. It contains only two Mexican species.

1. **Dexithea klugi.**

Clytus Klugii, Lap. & Gory, Mon. Clyt. p. 51, t. 10. f. 60.
Clytus (*Plagionotus*) *Klugii*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 490.
Dexithea Klugii, Thoms. Syst. Céramb. p. 185.

Hab. MEXICO (*Boucard*).

2. **Dexithea fabricii.**

Clytus (*Plagionotus*) *Fabricii*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 490, t. 9. f. 6[1].
Dexithea Fabricii, Lacord. Gen. Col. ix. p. 65, note.

Hab. MEXICO, Paso del Macho, Vera Cruz (*Sallé*[1]).

PLAGIONOTUS.

Plagionotus, Muls. Rectif. et Add. à la Monogr. des Longicornes (1842) ; Lacord. Gen. Col. ix. p. 66.
Glycobius, Leconte, Smithson. Misc. Coll. 265, pt. ii. p. 319 (1873).

Lacordaire would not venture to extend the limits of this genus beyond the few European and Mediterranean species contemplated by its founder. But *Clytus speciosus*, Say, of North America, the type of Dr. Leconte's genus *Glycobius*, is perfectly congeneric with the European *Plagionotus detritus*, and species of imilar structure of antennæ and legs and form of thorax and sternal processes occur in Mexico. Other species have been discovered in Eastern Siberia; the genus has therefore a wide range in the northern hemisphere. As in other modern genera of *Clytini*, the characters strongly marked in the extreme forms (which are nearly always chosen as the types) rapidly degenerate from species to species until all distinction from allied genera disappears. Thus *Plagionotus siculus* is scarcely distinguishable generically from *Clytus floralis*; similar blending of generic characters occurs in the Mexican fauna.

1. **Plagionotus regalis.**

Clytus (*Plagionotus*) *regalis*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 488[1].

Hab. MEXICO, Tepansacualco (*Sallé*[1]).

2. **Plagionotus astecus.**

Clytus (*Plagionotus*) *astecus*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 489[1].

Hab. MEXICO (*Truqui*[1], *Boucard*).

CLYTUS.

Clytus, Laicharting, Verz. Tyrol. Insekt. ii. p. 88 (1784); Lacordaire, Gen. Col. ix. p. 67.

This genus, in the restricted sense adopted by Lacordaire, is represented chiefly by species of the north temperate zone, both in the New and Old World. Of the two following Mexican species I know only *C. dimidiaticornis*, which is a true *Clytus* allied to the European *C. floralis*.

1. **Clytus montezuma.**

Clytus montezuma, Lap. & Gory, Mon. Clyt. p. 42, t. 9. f. 51; Chevr. Ann. Soc. Ent. Fr. 1860, p. 487.

Hab. Mexico.

2. **Clytus dimidiaticornis.**

Clytus dimidiaticornis, Chevr. Ann. Soc. Ent. Fr. 1860, p. 487 [1].

Hab. Mexico, La Parada, Oaxaca (*Sallé* [1]), near the capital (*Flohr*).

CLYTANTHUS.

Clytanthus, Thomson, Syst. Céramb. p. 190 (1864); Lacord. Gen. Col. ix. p. 68 (1864).
Clytus (div. *Anthoboscus*), Chevr. Ann. Soc. Ent. Fr. 1860, pp. 455 et 483 *et seq.* (nom. *Anthoboscus* præocc.).
Isotomus, Mulsant, Col. de France, Longic. éd. 2, p. 143, 1862–63 (nom. præocc.).
Clytus, Serville, White et auct. veter.

A numerous genus, comprising upwards of fifty species, found chiefly in north temperate latitudes and in the northern tropical zone of the Old World. Dr. Leconte mentions only two species as occurring in the United States; and none are recorded from South America or Tropical Africa, although one or two are known from South Africa.

1. **Clytanthus clathratus.**

Clytus (*Anthoboscus*) *clathratus*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 483 [1].

Hab. Mexico (*Truqui* [1]), Minas Viejas (*Dr. Palmer*).

2. **Clytanthus truquii.**

Clytus (*Anthoboscus*) *truquii*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 484.

Hab. Mexico.

3. **Clytanthus anthophilus.**

Clytus (*Anthoboscus*) *anthophilus*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 485 [1].

Hab. Mexico, La Parada, Oaxaca (*Sallé* [1]).

4. **Clytanthus nigropunctatus.**

Clytus (*Anthoboscus*) *nigropunctatus*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 486.

Hab. Mexico (*Truqui*).

MECOMETOPUS.

Mecometopus, Thomson, Class. Long. p. 222; Chevr. Ann. Soc. Ent. Fr. 1861, p. 387, et 1862, p. 58.
Neoclytus (partim), Lacord. Gen. Col. ix. p. 77.
Clytus, Lap. & Gory, White.

Lacordaire did not admit this genus as distinct from *Neoclytus*. It seems, however, quite as well defined as most of the other genera of the *Clytini* group adopted by him and other authors. To the slender form of the hind legs, especially the femora, and the elongated and subvertical forehead, are added a distinct style of coloration and markings, and a more circumscribed and compact area of distribution. The genus is peculiar to Tropical America, and contains about twenty known species. Only one is at present known from so far north as Mexico; and none have been recorded from beyond the southern limits of Brazil.

1. **Mecometopus jansoni.** (Tab. V. fig. 14.)

Mecometopus Jansoni, Trans. Ent. Soc. 1870, p. 399.

Hab. NICARAGUA, Chontales (*Belt*, *Janson*).

One of Belt's examples forms a variety in which the bright yellow spots of the elytra are much more extended than in the type, reducing the width of the black ground-colour. The middle sutural spot is prolonged and angular behind as in front, *i. e.* rhomboidal in shape instead of triangular.

The species, according to the description, seems to be closely allied to the Colombian *Mecometopus amaryllis* (Chevr.), which differs in the more slender antennæ and the red colour of the anterior legs.

2. **Mecometopus æsopus.**

Clytus (*Tillomorpha*) *æsopus*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 502, t. 9. f. 12[1].
Neoclytus æsopus, Bates, Trans. Ent. Soc. 1872, p. 187[2].

Hab. MEXICO, Cordova (*Sallé*[1]); NICARAGUA, Chontales (*Belt*[2]).

A species remarkable for the ridge-like elevations of the base of the elytra (two on each side) and the compressed and dilated hind tibiæ. The head is precisely that of a typical *Mecometopus*; and there are no grounds whatever for referring the species to the genus *Tillomorpha*, as Chevrolat has done. *Mecometopus polygenus* has also strongly dilated and compressed hind tibiæ; but they are shorter, and the dilatation is gradual and progressive from base to apex; in *M. æsopus* it is greatest in the middle, and the outer edge of the tibia forms a flexuous line.

The species is closely allied to the common *Mecometopus olivaceus*, Lap. & Gory, of South Brazil. In colour and markings they are nearly alike; and the Brazilian species even shows traces of the basal ridges of the elytra.

3. **Mecometopus högei.**

M. olivaceo et *æsopo* coloribus simillimus, cylindricus; capite nigro-olivaceo, antice minus elongato at fronte plana; thorace fulvo-olivaceo, antice et disco obscuriore, oblongo-ovato, linea dorsali paullulum transverse rugato; scutello olivaceo-nigro marginibus cinereis; elytris basi paullo gibbosis, apice truncatis et extus dentatis, basi usque ultra medium nigro-olivaceis macula utrinque obliqua subhumerali, altera simili pone scutellum juxta suturam, lineolaque transversa mediana cinereo-olivaceis, triente apicali fulvo-olivaceis apice ipso obscurioribus; meso- et metasternorum lateribus abdomineque flavescenti-albis; antennis filiformibus, corporis dimidio paullo longioribus, nigris; pedibus nigris, femoribus modice incrassatis, posticis apice bispinosis, femoribus posticis rectis, haud dilatatis.

Long. 5–6 lin.

Hab. Mexico, Paso del Macho (*Höge*).

Distinct from *M. æsopus* (which it greatly resembles in colours, although the markings towards the base of the elytra are different) by the much shorter forehead, longer antennæ, the absence of elytral ridges, and the undilated tibiæ. It also greatly resembles *M. olivaceus* (L. & G.), which has a similar short forehead; but the markings on the basal half of the elytra are very different from those of this species. *M. centurio*, a similarly coloured but very distinct species, from South Brazil, agrees also with it in the shorter forehead. The plane surface of the forehead and the comparatively slender hind femora decide me to place these three species in *Mecometopus* rather than in *Neoclytus*, to which genus they might be referred if attention were not paid to this character. The two genera, however, graduate into each other, as is the case with all the generic groups into which modern coleopterists have attempted to divide the *Clytini*.

4. **Mecometopus ion.**

Clytus (*Rhopalomerus*) *Jon*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 496 [1], t. 9. f. 9.
Neoclytus Ion, Bates, Trans. Ent. Soc. 1872, p. 186 [2].

Hab. Mexico, near the city (*Sallé* [1]); Nicaragua, Chontales (*Belt* [2]).

As stated in my enumeration of the Longicorns of Chontales (*loc. cit.*), the single specimen taken by Belt differs from Chevrolat's description and figure by an additional short yellow longitudinal stripe at the base of the elytra. A similar stripe lies also nearly parallel on the epipleura near the shoulder; and the antennæ appear shorter and thicker. It is impossible from a single specimen to decide whether these differences indicate a distinct species. The length and flatness of the forehead and the slenderness of the hind legs bring the species within the definition of the genus *Mecometopus*.

5. **Mecometopus macilentus.**

Mecometopus macilentus, Bates, Trans. Ent. Soc. 1872, p. 187.

Hab. Nicaragua, Chontales (*Belt*).

With the elytral markings, colours, and legs of the typical *Mecometopi*, this species differs by its shorter and broader forehead. Its position, however, seems more natural here than in *Neoclytus*.

NEOCLYTUS.

Neoclytus, Thoms. Musée Scientifique, p. 67 (1860); Lacord. Gen. Col. ix. p. 75.
Clytus (div. *Rhopalomerus*), Chevr. Ann. Soc. Ent. Fr. 1860, p. 457 (nom. *Rhopalomerus* præocc.).
Clytus (*Rhopalomerus*), Chevr. ib. p. 493 *et seq.*
Clytus, Serv., Lap. & Gory, White.

This genus, also exclusively American, has a wider range than *Mecometopus*, extending in numerous species throughout temperate North America, in the West Indies, and south of the tropics in South America. About a score species are known.

1. Neoclytus cacicus.

Clytus (*Rhopalomerus*) *cacicus*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 493, t. 9. f. 8[1].
Neoclytus rufus, Bates, Trans. Ent. Soc. 1872, p. 187 (nec Olivier)[2].

Hab. HONDURAS, Belize (*Sallé* [1]); GUATEMALA, Capetillo (*Champion*); NICARAGUA, Chontales (*Belt*, *Janson*).

In my enumeration of the Longicornia of Chontales[2] I referred this species to *N. rufus* of Olivier, which it greatly resembles, being distinguishable only by the slightly different shape and direction of the basal fascia of the elytra. I doubt whether it can be more than a local variety. The habitat of *N. rufus* was unknown to Olivier.

2. Neoclytus rufitarsis.

Clytus (*Rhopalomerus*) *rufitarsis*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 494[1].

Hab. GUATEMALA[1].

3. Neoclytus augusti.

Clytus Augusti, Chevr. Col. du Mexique, fasc. 4, Céramb. 4; Lap. & Gory, Mon. Clyt. p. 30, t. 7. f. 37.
Clytus dubius, Chevr. Col. du Mexique, fasc. 4, Céramb. 5 (var. ♂).
Clytus (*Rhopalomerus*) *Augusti*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 495[1].

Hab. MEXICO, Vera Cruz, Tlacotalpam [1].

4. Neoclytus clavipes.

Clytus (*Rhopalomerus*) *clavipes*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 495[1].

Hab. GUATEMALA[1].

From the description I should judge this species to belong to its author's genus *Rhopalopachys*.

5. Neoclytus curtulus.

Clytus (*Rhopalomerus*) *curtulus*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 497.

Hab. MEXICO (*Truqui*).

6. **Neoclytus mundus.**

Clytus (*Rhopalomerus*) *mundus*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 498, t. 9. f. 10 [1].

Hab. GUATEMALA, Yzabal (*Sallé* [1]).

Probably a *Mecometopus*.

7. **Neoclytus actæon.**

Clytus (*Rhopalomerus*) *acteon*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 499, t. 9. f. 11 [1].

Hab. MEXICO, Cordova (*Sallé* [1]).

8. **Neoclytus lebasi.**

Neoclytus Lebasii, Chevr. Ann. Soc. Ent. Fr. 1861, p. 381 [1]; Bates, Trans. Ent. Soc. 1872, p. 186 [2].

Hab. NICARAGUA, Chontales (*Belt* [2]).—SOUTH AMERICA, Colombia, Venezuela [1].

A single specimen only was found by Mr. Belt. It does not quite agree with Chevrolat's description.

9. **Neoclytus (?) distortus.**

Clytus (*Plagithmysus* ?) *distortus*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 500 [1].

Hab. MEXICO (*Truqui* [1]).

RHOPALOPACHYS.

Clytus (div. *Rhopalopachys*), Chevr. Ann. Soc. Ent. Fr. 1860, p. 457.
Rhopalopachys, Lacord. Gen. Col. ix. p. 74.

The following is the only described species:—

1. **Rhopalopachys morosus.**

Clytus (*Rhopalopachys*) *morosus*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 501 [1].

Hab. NORTH AMERICA; TEXAS [1].—MEXICO, Totosinapam (*Sallé* [1]), Paso del Macho (*Höge*).

XYLOTRECHUS.

Clytus (div. *Xylotrechus*), Chevr. Ann. Soc. Ent. Fr. 1860, p. 456.
Xylotrechus, Lacord. Gen. Col. ix. p. 77.

A widely distributed genus, distinguished by the raised lines of the forehead. It is represented in high latitudes in Europe and in North America, and is abundant both in species and individuals in Tropical Asia; but it is not known to occur in South America, and one representant only is known from Mexico and Central America. About fifty species have been described.

1. **Xylotrechus sartorii.**

Clytus (*Xylotrechus*) *Sartorii*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 492, t. 9. f. 7 [1].

Hab. MEXICO, Mirador (*Sallé* [1]), Paso del Macho (*Höge*).

TILLOMORPHA.

Tillomorpha, Blanchard, in Gay, Hist. d. Chile, Zool. v. p. 482 (1851); Lacord. Gen. Col. ix. p. 90; Leconte, Smiths. Misc. Coll. no. 265, pt. ii. p. 320.

The latest definitions of this genus given by authors leave its limits in a very unsatisfactory state. According to Lacordaire and Leconte, simple, rounded eyes are an essential feature; but the type of the genus, *T. lineoligera*, of Chili, has the usual reniform eyes of the Cerambycidæ. In the Munich Catalogue an Australian species is enumerated in the genus, which is unlikely to be its true place. If the views of the authors above named are correct, the genus ranges from Chili to the middle States of North America, including Brazil, Colombia, and Mexico.

1. Tillomorpha balteata.

Clytus (*Tillomorpha*) *balteatus*, Chevr. Ann. Soc. Ent. Fr. 1860, p. 503 [1].

Hab. Mexico, Tuxpam (*Sallé* [1]).

This species, according to the description, seems to have no near resemblance to the genus.

2. Tillomorpha hæmatocephala.

Tillomorpha hæmatocephala, Chevr. Ann. Soc. Ent. Fr. 1862, p. 534.

Hab. Mexico.

EUDERCES.

Euderces, Leconte, Journ. Acad. Phil. ser. 2, ii. p. 30; id. Smiths. Misc. Coll. no. 265, pt. ii. p. 320.

Only four species properly belonging to this genus have been described, all North-American. The following is strictly congeneric with Leconte's type *E. picipes*:—

1. Euderces reticeps.

Parvus, nigro-piceus; antennis, pedibus elytrisque rufo-castaneis, nitidis, his fascia recta mediana eburnea; capite reticulato-punctato; pronoto longitudinaliter strigoso; thorace postice valde, antice minus constricto, medio paullo dilatato et convexo.

Long. $2\frac{1}{4}$ lin.

Hab. Guatemala, near the city, 5000 feet (*Salvin*).

Distinguished, besides its minute dimensions, by the net-like sculpture of the surface of the head and by the form of the thorax, which is somewhat constricted near its anterior margin and very greatly narrowed, as well as depressed, at the base, the middle portion being dilated (more so in some examples than others) and convex. The antennæ are very similar in form and proportions of the joints to those of *E. picipes*. The elytra have only a slight and obtuse elevation at the base on each side, behind which they are depressed, becoming moderately convex again posteriorly, with rounded apices; their surface is shining and sparsely punctured, each puncture bearing a long erect bristle. The femora are abruptly clavate, and the hind tarsi short, as in *E. picipes*.

APILOCERA.

Apelocera, Chevr. Ann. Soc. Ent. Fr. 1862, p. 61.
Apilocera, Chevr. ibid. p. 535; Pascoe, Trans. Ent. Soc. 3rd ser. vol. v. p. 295 (1866).
Euderces (partim), Lacord. Gen. Col. ix. p. 89 (1869).

Although not admitted by Lacordaire, this genus is well defined and seems perfectly natural. The distinguishing feature is the long spine which terminates the third antennal joint. Five species have been described, all Tropical-American, the genus ranging from South Brazil to Mexico.

1. **Apilocera spinicornis.**

Clytus spinipennis, Chevr. Col. du Mexique, 4me fasc. *Clytus,* no. 7[1].
Clytus spinicornis, Chevr. ibid. table; Lap. & Gory, Mon. Clyt. p. 108.
Clytus elegans, Lap. & Gory, ibid. t. 20. f. 128.

Hab. Mexico, Vera Cruz [1]; Guatemala, Capetillo (*Champion*).

2. **Apilocera boucardi.**

Apilocera Boucardi, Chevr. Ann. Soc. Ent. Fr. 1862, p. 535[1].

Hab. Guatemala, Coban, Vera Paz [1]; Honduras, R. Sarstoon (*Blancaneaux*).

CLEOZONA.

Cleozona, Bates, Trans. Ent. Soc. 1874, p. 223.

The following is the only known species:—

1. **Cleozona pulchra.** (Tab. VI. fig. 10.)

Cleozona pulchra, Bates, loc. cit.

Hab. Nicaragua, Chontales (*Belt*).

DIPHYRAMA.

Diphyrama, Bates, Trans. Ent. Soc. 1872, p. 187.

One species only is yet known of this genus, remarkable for the clavate, almost globose, third and fourth antennal joints in the male.

When I drew up the diagnosis cited above I had not seen the female of the genus, but mistook the individuals with shorter antennæ for that sex, these organs differing considerably in length in the different specimens. Among the series of the insect in Belt's collection, acquired by Mr. Godman since the death of that traveller, there is a single true female, distinguished at once by the simple antennæ, thus showing that the tumid joints are only a sexual character. There is also a sexual difference in the terminal joints of the antennæ, which are much dilated in the female.

1. **Diphyrama singularis.** (Tab. V. fig. 12.).

Diphyrama singularis, Bates, Trans. Ent. Soc. 1872, p. 188.

Hab. NICARAGUA, Chontales (*Belt*).

LISTROPTERA.

Listroptera, Serville, Ann. Soc. Ent. Fr. 1834, p. 71.

Eight species have been described of this genus, all from Tropical South America. One of them extends its range far into Central America.

1. **Listoptera aterrima.**

Listroptera aterrima, Germar, Ins. Spec. Nov. p. 497 ; Bates, Trans. Ent. Soc. 1872, p. 188 [2].

Hab. NICARAGUA, Chontales (*Belt* [2], *Janson*) ; COSTA RICA (*Rogers*).—SOUTH AMERICA to Santa Catharina, SOUTH BRAZIL.

DIHAMMOPHORA.

Dihammophora, Chevrolat, Arcana Naturæ, p. 51 (1859) ; Lacord. Gen. Col. ix. p. 108.
Listroptera (partim), White, Cat. Long. Col. B. M. ii. p. 207.

Also an exclusively American genus, ranging in the south as far as Buenos Ayres, and in the north to the *tierras calientes* of Mexico. Sixteen species have been described.

1. **Dihammophora chontalensis.** (Tab. V. fig. 13.)

Dihammophora Chontalensis, Bates, Trans. Ent. Soc. 1872, p. 188.

Hab. NICARAGUA, Chontales (*Belt*).

2. **Dihammophora aurovittata.**

D. marginicolli similis, at thoracis vittis sericeo-pubescentibus ; linearis, postice vix dilatata, atra ; frontis marginibus auro-sericeis ; thorace lineari, dorso atro, vittis duabus (marginem posticum vix attingentibus) auro-pubescentibus sericeis (vitta dorsali nigra nuda grosse punctata), subtus fulvo ; elytris crebre sublineatim punctatis, lateribus anguste bicostatis ; pedibus nigris, nitidis, femoribus basi flavo-testaceis.
Long. 3 lin.

Hab. GUATEMALA, Capetillo, Zapote (*Champion*).

3. **Dihammophora dispar.**

Dihammophora dispar, Chevr. Arc. Nat. p. 52.

Hab. MEXICO.

RHOPALOPHORA.

Rhopalophora, Serv. Ann. Soc. Ent. Fr. 1834, p. 100 ; Chevr. Arc. Nat. p. 57.
Tinopus, Leconte, Journ. Ac. Phil. ser. 2, ii. p. 19.

Twenty-five species of this elegant genus have been described, all American. Although most numerous in the tropical region, the genus extends into temperate

latitudes, both north and south, one species being recorded from Chili and several from the United States.

1. **Rhopalophora cupricollis.**

Rhopalophora cupricollis, Guérin, Icon. R. A. texte, p. 234[1]; Bates, Trans. Ent. Soc. 1872, p. 188[2].

Hab. Mexico[1], Almolonga (*Höge*); Nicaragua, Chontales (*Belt*[2]).

The single Chontales specimen differs from Mexican examples in wanting the dark short dorsal line of the thorax.

2. **Rhopalophora lineicollis.**

Rhopalophora lineicollis, Chevr. Arc. Nat. p. 60.

Hab. Mexico.

3. **Rhopalophora rubecula.**

Rhopalophora venezuelensis, Bates.

R. venezuelensi (Chevr.) proxime affinis, differt prothorace subtus rufo: elongata, sublinearis, antennis pedibusque nigro-nitidis; capite thoraceque læte aureo-pubescentibus, hoc vitta dorsali alteraque indistincta utrinque laterali nigris, subtus rufo; prosterno (inter pedes), meso- et metasternis subtilissime cinereo-tomentosis; elytris flavo-cinereo subtiliter pubescentibus, sparsim punctulatis, apice vix truncatis.

Long. 6–6½ lin. ♂ ♀.

Hab. Guatemala, Capetillo (*Champion*); Nicaragua (*Belt*[1]); Costa Rica (*Rogers*).

I had referred the solitary example of this species brought home by Mr. Belt to *Rh. venezuelensis*, Chevr. Further examples from Guatemala and Costa Rica show that it differs constantly from that species by the prothorax being pale red underneath, the posterior portion near the insertion of the anterior legs being clothed with silky golden or ashy pubescence. It is, besides, a distinctly narrower insect.

4. **Rhopalophora miniatocollis.**

Rhopalophora miniatocollis, Chevr. Arc. Nat. p. 61[1].

Hab. Mexico (*Sallé*[1]).

5. **Rhopalophora tenuis.**

Listroptera tenuis, Chevr. Rev. et Mag. Zool. 1855, p. 181.

Rhopalophora tenuis, Chevr. Arc. Nat. p. 62.

Hab. Mexico.

6. **Rhopalophora incrustata.**

Rhopalophora incrustata, Chevr. Arc. Nat. p. 62[1].

Hab. Mexico, Oaxaca (*Sallé*[1]), near the capital (*Flohr*).

7. **Rhopalophora lævicollis.**

Rhopalophora lævicollis, Leconte, Smiths. Misc. Coll. no. 264, p. 193[1].

Hab. North America, Texas[1].—Northern Mexico[1].

8. **Rhopalophora versicolor.** (Tab. V. fig. 15.)

Rhopalophora versicolor, Chevr. Arc. Nat. p. 62[1]; Bates, Trans. Ent. Soc. 1872, p. 188[2].

Hab. Nicaragua, Chontales (*Belt*[2], *Janson.*)—South America, Colombia[1].

9. **Rhopalophora serripes.**

Rhopalophora serripes, Bates, Trans. Ent. Soc. 1872, p. 188.

Hab. Nicaragua, Chontales (*Belt*).

COSMISOMA.

Cosmisoma, Serville, Ann. Soc. Ent. Fr. 1834, p. 19; Lacord, Gen. Col. ix. p. 112.
Cosmosoma, Har. & Gemm. Cat. Col. p. 2948.

One of the most beautiful genera of American Longicornia, belonging to the Rhopalophorini group, and distinguished by the brushes of silky hairs on the antennæ, which are present, of great diversity of shape and colour, on the fifth joint, but sometimes in addition on other joints, and even on the hind tibiæ. Nineteen species are known, from South Brazil to Nicaragua.

1. **Cosmisoma martyra.** (Tab. V. fig. 16.)

Cosmisoma martyr, Thoms. Class. Long. p. 180[1].
Cosmisoma martyra, Bates, Trans. Ent. Soc. 1872, p. 189[2].

Hab. Guatemala, Zapote (*Champion*); Nicaragua, Chontales (*Belt*[2]); Costa Rica[1].

The single specimen from Guatemala (a female) is of a brighter brassy-green general colour than the Nicaraguan examples, and the thorax is a little less closely punctulated.

2. **Cosmisoma titania.** (Tab. V. fig. 17.)

Cosmisoma Titania, Bates, Trans. Ent. Soc. 1870, p. 407[1].

Hab. Nicaragua, Chontales (*Belt*[1], *Janson*).

3. **Cosmisoma plumicornis.**

Leptura plumicornis, Drury, Ill. iii. p. 74, t. 49. f. 3.
Cosmisoma plumicornis, Pascoe, Trans. Ent. Soc. 3rd ser. v. p. 291[1].

Hab. Costa Rica?—South America, Colombia[1].

I obtained a specimen of this beautifully ornamented species out of a small collection of insects received by Mr. Gerrard from an ornithological traveller, and obtained, he believed, from Costa Rica.

OZODES.

Ozodes, Serville, Ann. Soc. Ent. Fr. 1834, p. 98.

Ten species have been recorded of this distinct genus, peculiar to Tropical America.

1. **Ozodes multituberculatus.**

Ozodes multituberculatus, Bates, Tr. Ent. Soc. 1870, p. 409[1].

Hab. NICARAGUA, Chontales (*Belt*[1], *Janson*).

2. **Ozodes xanthophasma.** (Tab. VI. fig. 14.)

Ozodes xanthophasma, Bates, Tr. Ent. Soc. 1872, p. 189[1].

Hab. NICARAGUA, Chontales (*Belt*[1]).

ORNITHIA.

Ornithia, Thomson, Syst. Céramb. p. 213; Lacord. Gen. Col. ix. p. 117.
Trichophorus, Guér. Icon. R. A. texte, iii. p. 228.
Ozodes, Sturm.

The following is the only known species:—

1. **Ornithia chevrolati.**

Trichophorus Chevrolatii, Guér. Icon. R. A. texte, iii. p. 228[1].
Ozodes mexicanus, Sturm, Cat. ed. 1843, t. 6. f. 4, 5.
Ornithia Chevrolatii, Bates, Trans. Ent. Soc. 1872, p. 190[3].

Hab. MEXICO[1], Misantla (*Höge*); HONDURAS (*Blancaneaux*); NICARAGUA, Chontales (*Belt*[3], *Janson*).

CHRYSOPRASIS.

Chrysoprasis, Serville, Ann. Soc. Ent. Fr. 1834, p. 5.
Callichroma, Germar, Ins. Spec. Nov. p. 496.

A genus of small metallic-coloured Cerambycidæ, differing from *Callichroma,* to which they have a superficial resemblance in colours, by the closed sockets of the middle coxæ and other characters. The species are very numerous in the equatorial forest-region of America, and some are found as far south as the La Plata; but they diminish in numbers as we advance northward, and none have yet been recorded from Mexico. About fifty species are known, all American.

1. **Chrysoprasis belti.** (Tab. VI. fig. 2.)

Chrysoprasis Belti, Bates, Trans. Ent. Soc. 1872, p. 190.

Hab. NICARAGUA, Chontales (*Belt*).

2. **Chrysoprasis sthenias.**

Chrysoprasis sthenias, Bates, Trans. Ent. Soc. 1870, p. 411.

Var. Femoribus nigris, vix æneo tinctis.

Hab. NICARAGUA, Chontales (*Belt*).—SOUTH AMERICA, Amazons.

A robust species with short spined antennæ, reticulate-punctate pronotum and metasternum, and thickly punctured femora. South-American specimens have brassy-green

femora; the single example taken by Mr. Belt differs from them only in the femora being nearly black.

3. Chrysoprasis seticornis.

Chrysoprasis sobrina?, Bates, Trans. Ent. Soc. 1872, p. 190[1].

Chr. sobrinæ (Bates) proxime affinis, minus nitida, femoribus gracilibus æneis etc. Elongato-subelliptica, sericeo-viridis, subopaca, dense breviter setosa, thorace postice gradatim ampliato, juxta basin paullo constricto, dorso reticulato-punctato; elytris subtiliter punctulatis; metasterno discrete aciculato-punctato, cum coxis æneo-nitido; abdomine rufo, vix punctulato; femoribus gracilibus æneo-nigris, nitidis, punctis magnis et parvis parce impressis; antennis brevibus, nec spinosis nec infra ciliatis, sparsim setosis, articulis 3°–6ᵐ obtuse carinatis.

Long. 5 lin.

Hab. NICARAGUA, Chontales (*Belt*[1], *Janson*).

Registered doubtfully as *C. sobrina* in my enumeration of Chontales Longicorns[1]. Two more specimens having been obtained, and the differences found to be constant, it is necessary to separate it as a distinct species.

4. Chrysoprasis jacintha.

Chrysoprasis hirtula, Bates, Trans. Ent. Soc. 1872, p. 190 (nec White).

Chr. hirtulæ (White) proxime affinis, at differt elytris saturate azureis femoribusque viridi-æneis. Parva, dense setosa, supra saturate azurea subopaca, thorace fere nigro; femoribus viridi-æneis, punctis grossis elongatis insculptis; antennis brevibus, haud spinosis, longe setosis, scapo cyaneo excepto nigris; thorace subrotundato, postice perparum ampliato, dorso reticulato-punctato; metasterno cyaneo, subnitido, sparsim punctulato; abdomine rufo.

Long. $3\frac{1}{2}$ lin.

Hab. NICARAGUA, Chontales (*Belt*).

Besides the apparently constant difference in colour, the body is distinctly shorter than in *C. hirtula*.

STENOSPHENUS.

Stenosphenus, Haldeman, Trans. Am. Phil. Soc. x. 1847, p. 39; Lacord. Gen. Col. ix. p. 130.
Elaphidion, Newman; Leconte.

This well-defined and easily-recognizable genus is peculiar to North America; Mexico appearing to be its head quarters, the species diminishing in numbers both north and south of that country. Three species are recorded from the United States, one of which extends as far north as Pennsylvania; to the south, Costa Rica appears the furthest limit of the genus. Thirteen species are now known.

1. Stenosphenus amabilis.

Elaphidion amabile, Newm. Entom. p. 112.

Hab. MEXICO.

2. **Stenosphenus sobrius.**

Elaphidion sobrium, Newm. Entom. p. 30 [1].

Hab. North America [1].—Mexico, San Luis Potosi (*Dr. Palmer*).

3. **Stenosphenus subtilis.**

Gracilis, niger, cinereo-setosus, femoribus rufis; thorace subelongato, antice gradatim angustato, juxta basin angustato, sparsissime punctato; elytris versus apicem valde angustatis, apice ipse truncato et bispinoso, supra passim subtiliter pubescentibus.

Long. 5–6 lin. ♂ ♀.

Hab. Guatemala, near the city (*Salvin*), San Gerónimo (*Champion*).

Similar in form and colours to *S. cribripennis* (Thoms.), but a much slenderer insect both in body and in antennæ, which latter, in some males, are twice the length of the body. It is further distinguished by the much finer punctuation of the elytra and the under surface of the body.

4. **Stenosphenus cribripennis.**

Stenosphenus cribripennis, Thoms. Class. Long. p. 372 [1].

Hab. Mexico [1], Tehuantepec (*Sumichrast*); Guatemala, Tocoy, Vera Paz (*Champion*).

5. **Stenosphenus rufipes.**

Stenosphenus rufipes, Bates, Trans. Ent. Soc. 1872, p. 191.

Hab. Mexico, Tehuantepec (*Sumichrast*).

6. **Stenosphenus trispinosus.**

Stenosphenus trispinosus, Bates, Trans. Ent. Soc. 1872, p. 191.

Hab. Mexico; Guatemala, near the city (*Salvin*), Dueñas (*Champion*).

7. **Stenosphenus ebeninus.** (Tab. VI. fig. 5.)

Stenosphenus ebeninus, Bates, Trans. Ent. Soc. 1872, p. 234.

Hab. Nicaragua, Chontales (*Belt*); Costa Rica (*Rogers, Van Patten*).

8. **Stenosphenus protensus.**

Maxime elongatus, niger, nitidus, thorace a basi usque ad apicem angustato, basi paullo depresso, dorso fere impunctato; antennis scapo piceo, grosse punctato; elytris apice oblique truncatis, angulo exteriore valde producto, dorso sparsim sublineatim punctulatis, cinereo-setosis; femoribus rufo-piceis.

Long. $7\frac{1}{4}$ lin. ♂.

Hab. Guatemala, Zapote (*Champion*).

Closely allied to *S. ebeninus*, but still more elongated, with elytra obliquely truncated at the apex, and rather evenly but widely lineate-punctulate.

9. **Stenosphenus suturalis.**

Stenosphenus suturalis, Bates, Trans. Ent. Soc. 1872, p. 191.

Hab. Mexico.

10. **Stenosphenus hirsutipennis.**

Stenosphenus hirsutipennis, Bates, Trans. Ent. Soc. 1872, p. 191.

Hab. Mexico, Almolonga (*Höge*).

A species closely allied to *S. lugens*, Leconte, from Texas, having the same peculiar sculpture of the elytra, but differing in its red thorax.

11. **Stenosphenus ochraceus.** (Tab. VI. fig. 6.)

Stenosphenus ochraceus, Bates, Trans. Ent. Soc. 1872, p. 190.

Hab. Nicaragua, Chontales (*Belt*).

By far the largest and finest species of the genus, collected in great numbers by Mr. Belt.

AGALLISSUS.

Agallissus, Dalman, Anal. Ent. p. 66 (1823).
Cryptopleura, Leconte, Smithson. Misc. Coll. no. 265, pt. ii. p. 321.

Four species of this very distinct genus have been described from Mexico and countries adjacent.

1. **Agallissus melaniodes.**

Agallissus melaniodes, Dalm. Anal. Ent. p. 66 [1]; White, Cat. Long. Col. B. M. i. p. 61 [2].

Hab. Mexico [1]; Honduras [2].

This species appears to be variable in the extent of its red markings. The unique specimen which served Dalman for his description had a subapical red belt, not reaching the suture; but it had also a red spot on the disk of one elytron which was wanting on the other. The following, I think, are very probably varieties:—

Var. **concolor.**

Niger, pilosus, elytris totaliter nigro-chalybeis; thorace quadrato-ovato, ante medium paullulum dilatato, sparsim punctato.
Long. $7\frac{1}{4}$ lin.

Hab. Honduras, from Mr. W. W. Saunders's collection.

Var. **trifasciatus.**

Niger, pilosus, elytris nigro-chalybeis, fascia lata ante, altera angustiore (versus latera dilatata) pone medium, tertiaque parva apicali læte rubris; thorace paullo angustiore, ante medium angulatim dilatato.
Long. $7\frac{1}{4}$ lin.

Hab. Honduras, R. Sarstoon (*Blancaneaux*).

2. **Agallissus quadrimaculatus.**

Agallissus quadrimaculatus, White, Cat. Long. Col. B. M. i. p. 61, t. 3. f. 2[1].

Hab. Honduras (*Dyson* [1]).

3. **Agallissus clytoides.**

Angustior, postice angustatus, pilosus, subæneo-niger; elytris nigro-violaceis, apice valde obtuso serratis, utrinque maculis quatuor croceis, viz. 1ª vittæformi prope scutellum, 2ª rotundata marginali, 3ª mediana ovata, et 4ª longe ante apicem transversa, fere divisa; capite thoraceque lateribus cinereo-pubescentibus, hoc breviter subcylindrico, medio rotundato, sparsim punctulato, linea dorsali brevi; elytris passim sparse punctulatis; pedibus piceo-rufis, femoribus apice tibiisque basi nigris.

Long. $6\frac{3}{4}$ lin.

Hab. Mexico (*Boucard*).

Possibly the *A. clytoides*, Dej. Cat., a species which has never been described, except with regard to its general form in a note by Lacordaire (Gen. Col. ix. p. 134); and in that respect the present insect agrees with it. The elytra are much smoother than in *A. melaniodes*.

4. **Agallissus gratus.**

Agallissus gratus, Leconte, Smithson. Misc. Coll. no. 265, pt. ii. p. 321[1].

Cryptopleura grata, Haldeman, sec. Leconte loc. cit.

Hab. North America, Texas [1].—Northern Mexico [1].

ANCYLOCERA.

Ancylocera, Serville, Ann. Soc. Ent. Fr. 1834, p. 107.

Peculiar to America, ranging from the Argentine Republic in the south to the middle States in the north. Eight species have been described.

1. **Ancylocera macrotela.**

Ancylocera rugicollis, Bates, Trans. Ent. Soc. 1872, p. 191 (nec Fab.).

A. bicolori Ol. (=*rugicollis*, Fab.) simillima, sed differt antennarum articulo undecimo elongato, apice solum hamato, necnon elytrorum apice extus angulato. Nigra, elytris abdomineque rubris; thorace punctato et transversim rugato; elytris crebre dorso seriatim punctatis.

Long. 5–6 lin. ♂ ♀.

Hab. Guatemala, S. Gerónimo (*Champion*); Nicaragua, Chontales (*Belt*).

Very closely resembling the North-American *A. rugicollis*, Fab. (=*bicolor*, Oliv.), differing from that species chiefly by the greater length of the eleventh joint of the antennæ in the male (the terminal joints were wanting in the example I formerly determined as *A. rugicollis*). In *A. rugicollis*, as in *A. cardinalis*, the eleventh joint in the male is excessively short, and forms a slightly curved hook; but in *A. macrotela* it is more than half the length of the tenth joint, and the hook is formed by the

minute appendage or false joint at the end. In support of this specific difference it is to be noted that the outer edge of the apical truncature of the elytra forms a more distinct angle, and the femora are less abruptly clavate. The elytra, too, are relatively shorter, and their punctures larger and more separate.

2. **Ancylocera sallei.**

Ancylocera Sallei, Buquet, Arch. Entom. i. p. 332[1].

Hab. Mexico (*Sallé*[1]).

Distinguished (*inter alia*) by the brown sutural streak of the elytra.

CHAMPIONA, nov. gen.

Corpus fere cylindricum, angustum. Caput parvum, antice verticale, inter antennas modice elevatum lineaque centrali profunde impressum. Oculi fere divisi, lobo superiore parvo. Palpi brevissimi, apice modice securiformes. Thorax elongatus, inermis, transverse plicatus. Elytra apice utrinque bispinosa. Prosternum inter pedes angustum. Acetabula intermedia clausa. Metasterni episterna angusta, subparallela. Abdomen normale. Pedes elongati, graciles; femora versus apicem modice clavata; tibiæ carinatæ; tarsi subbreves. Antennæ (♂?) corpore paullo longiores, filiformes, articulis 3°–6^{m} apice unispinosis, scapo subgrosso, mox a basi dilatato, articulo 3° quam cæteri multo longiore, 4° quam sequente breviore, 11° quam precedens longiore, curvato.

A new genus is necessary for the reception of an extraordinary and beautiful little Longicorn, of which Mr. Champion has recently sent home a specimen. Although wanting most of the obvious characters of *Ancylocera*, I think there can be no doubt its affinities lie close in the direction of that genus. The vertical forehead (though decidedly longer in *Championa*), general form of the head, the elongate, unarmed thorax, the large but not inelegant sculpture of the upper surface of the body, and the general shape of the legs, all remind one of *Ancylocera*; but a stronger indication of affinity still is afforded by the curved tips of the antennæ.

1. **Championa aurata.**

Gracilis, cylindrica, læte viridi-aurata nitida, sparsim breviter cinereo-setosa, elytris fasciola angusta cinerea paullo ante apicem; capite rugoso-punctato; thorace omnino transversim plicato; elytris crebre, grosse, versus apicem subconfluenter punctatis, apice utrinque bispinosis.

Long. 5½ lin. ♂ (?).

Hab. Guatemala, Calderas (*Champion*).

The whole insect is of a bright brassy-green colour, glowing on the head and thorax with a golden or red-golden hue. The ashy pubescence is very long and somewhat dense on the legs, antennæ, and under surface of the body, but it does not obscure the bright ground-colour.

STENYGRA.

Stenygra, Serville, Ann. Soc. Ent. Fr. 1834, p. 95.

Five species of this conspicuous Tropical-American genus have so far been described.

1. **Stenygra histrio.**

Stenygra histrio, Serville, loc. cit. p. 97 [1].

Hab. Mexico [1], Plan del Rio (*Höge*); Guatemala, San Gerónimo (*Champion*); Nicaragua, Chontales (*Belt*).

PLATYARTHRON.

Platyarthron, Guérin, Icon. R. A. iii. p. 230 (1843).
Cœlomarthron, Thomson, Class. Long. p. 199 (1860).
Cœlarthron, Lacordaire, Gen. Col. ix. p. 142 (1869).

Allied to *Stenygra*, and equally remarkable in form and coloration. Its range is similarly restricted to Tropical America, the species described by M. Thomson as *Cœlomarthron chilense* being with great probability a Central-American and not a Chilian insect. Four species are known.

1. **Platyarthron bilineatum.**

Platyarthron bilineatum, Guérin, Icon. R. A. iii. p. 230 [1].

Hab. Mexico [1].

2. **Platyarthron rectilineum.**

Angustum, lineare, nigrum, politum, elytris utrinque linea fere ad apicem extensa subrecta lineolaque laterali sub humeros eburneis; capite inter oculos unisulcato, occipite punctato-ruguloso; thoracis lateribus opacis alutaceis, dorso polito transverse plicato, linea utrinque argenteo-sericea; elytris planis fere impunctatis; antennis articulis 3°–6^{m} oblongo-ovatis, incrassatis, late sulcatis.

Long. 9 lin.

Hab. Guatemala, Zapote (*Champion*).

Differs from *P. bilineatum* and the rest of its congeners by the single eburneous line of the elytra, which is nearly straight, curving only very slightly outwards, and extending from the base to within a short distance of the apex. The apical margin is obtusely rounded. The thorax is similar in form to that of *P. bilineatum*, but very different in sculpture, the flanks being opaque with excessively minute sculpture, and the dorsal surface for a considerable breadth polished and scored transversely, but not densely, with fine rugæ.

3. **Platyarthron quadrinotatum.** (*Cœlarthron quadrinotum*, Tab. VI. fig. 1.)

Cœlarthron quadrinotatum, Bates, Trans. Ent. Soc. 1869, p. 385.
Cœlomarthron chilense, Thomson, Class. Long. p. 200 (1860)?

Hab. Nicaragua, Chontales (*Belt, Janson*).

The description above cited of Thomson's *Cœlomarthron chilense* agrees so well with the Nicaragua insect that there can be little doubt it refers to the same species. The locality given is very probably erroneous.

CERAGENIA.

Ceragenia, Serville, Ann. Soc. Ent. Fr. 1834, p. 32.

Peculiar to Tropical America. Three species are known.

1. **Ceragenia leprieuri.**

Ceragenia Leprieurii, Buquet in Guér. Icon. R. A. iii. p. 219[1].

Hab. Panama, Chiriqui (*Ribbe*).—South America, Cayenne [1].

Agrees with *C. leprieuri* in the spinose apices of the four hinder tibiæ and the equally spined exterior angle of the elytral truncature. *C. spinipennis,* Bates, from the Amazons, agrees in these points of structure, but differs a little in colours and markings.

EVANDER.

Evander, Thomson, Class. Long. p. 377 (1860).
Amphidesmus, Guérin, Mag. Zool. Ins. t. 146 (1844, nec Serville).

A genus peculiar, as far as at present known, to Mexico and the adjoining parts of Central America; but it is closely allied to West-African and South-American genera. Four species are known.

1. **Evander nietoi.**

Amphidesmus Nietii, Guérin, Rev. Zool. 1844, p. 258; Mag. Zool. Ins. t. 146 (1844) [1].
Evander Nietoi, Harold & Gemminger, Cat. Col. p. 2964.

Hab. Mexico (*Nieto* [1]).

2. **Evander nobilis.** (Tab. VI. fig. 11.)

Evander nobilis, Bates, Trans. Ent. Soc. 1872, p. 192.

Hab. Nicaragua, Chontales (*Belt*).

This species closely resembles *E. nietoi* in colours, one variety having the black circumscutellar spot which seems at first sight to be distinctive of *E. nietoi.* The scutellum, however, seems to be constantly different in form, being narrow with straight sides in *E. nobilis,* and broad with incurved sides and narrowed to a point in *E. nietoi.*

3. **Evander unicolor.** (Tab. VI. fig. 12.)

E. nietoi proxime affinis. Supra isabellino-fulvus, occipite, lineis tribus thoracis (mediana abbreviata) scutelloque nigris; antennis, pedibus et corpore subtus nigris, pro- et mesosterno medio, femoribus anticis macula fulvis; thorace grosse confertissime scabroso-punctato, disco sulco angusto longitudinali; antennarum scapo antice retuso nigro-piloso.

Long. $11\frac{1}{2}$ lin. ♂.

Hab. Costa Rica, Cache (*Rogers*).

The sculpture of the thorax is different from that of *E. nietoi,* the punctuation being much coarser and interrupted in the middle by a deeply impressed dorsal line extending

from the front nearly to the hind margin, in which the short central black vitta seems partly imbedded. The black vitta is, in fact, only the surface-colouring of a narrow strip of the integument, which is vertically flexuous, and at its extremity (near the centre of the pronotum) is detached from the sides of the sulcus. The same peculiar structure is seen in *E. nobilis*; but the sculpture is not so coarse in that species. The scutellum is formed nearly as in *E. nietoi*.

4. **Evander xanthomelas.**

Amphidesmus xanthomelas, Guérin, Rev. Zool. 1844, p. 258[1]; Mag. Zool. 1844, *Amphidesmus*, p. 3.

Hab. MEXICO[1]; GUATEMALA, Tocoy, 1000 feet (*Champion*).

DELTOSOMA.

Deltosoma, Thomson, Syst. Céramb. p. 258 (1864); Lacordaire, Gen. Col. ix. p. 163.

This genus belongs to a small group in which the elytra are dilated and flattened out in imitation of the Lycidæ (tribe Malacodermata), the characteristic colours of which they also imitate. *Deltosoma* is further remarkable for the distinct lateral margins of the pronotum, a character of the Prionidæ family. Only one species has been described; but others, all very closely allied, exist unnamed in collections. The range of the genus is confined to Tropical America, from Bolivia to Guatemala.

1. **Deltosoma guatemalense.**

Paullulum convexum, elytris gradatim modice a humeris usque prope apicem dilatatis, apice ♂ magis, ♀ minus, late et obtuse rotundatis, marginibus haud explanato-reflexis; thorace fere semicirculari, basi utrinque sinuata; elytris obtuse et late bicostatis; corpore toto breviter erecte setoso, cum antennis pedibusque nigro, occipite medio, thoracis marginibus et maculis dorsalibus fulvis; elytris cyaneo-nigris, humeris et fascia lata mediana fulvis.

Long. $5\frac{1}{2}$–$8\frac{1}{2}$ lin. ♂ ♀.

Hab. GUATEMALA, San Gerónimo (*Champion*).

The amount of tawny-yellow colour on the thorax is variable: there is always a spot on the front margin near the middle; but sometimes there are also two other spots nearer the disk; the underside of the thorax is sometimes nearly entirely fulvous.

PTEROPLATUS.

Pteroplatus, Buquet, Rev. Zool. 1840, p. 287; Ann. Soc. Ent. Fr. 1840, p. 385; Lacordaire, Gen. Col. ix. p. 164.

The species of this genus (also peculiar to America) closely mimic the Lycidæ, and they are more numerous than the *Deltosomæ*. The range is rather more extended, reaching from the Argentine territory in the south to Florida in the north. Twenty species have been described.

1. **Pteroplatus quadriscopulatus.**

Pt. variabili (Sallé) simillimus, at differt utroque sexu articulis antennarum 3°–6^{m} dense penicillatis. Elongatus, postice modice dilatatus, niger vel nigro-violaceus, pilosus, elytris humeris late fasciaque mediana fulvis, vel nigris humeris tantum fulvis; capite thoraceque fulvis, illo vertice vittaque occipitali, hoc vittis tribus, fulvis; corpore subtus medio interdum fulvo.

Long. 6–7 lin. ♂ ♀.

Hab. GUATEMALA, Zapote, Capetillo (*Champion*).

Closely resembling *Pt. variabilis*, Sallé (Caraccas, Venezuela); variable in colours like that species, though not quite in the same manner, and in shape offering no perceptible difference. It differs, however, constantly in both sexes in having the antennal joints from the third to the sixth furnished on one side with a long and very dense brush of silky hairs, *Pt. variabilis* having such a brush only on the sixth joint.

2. **Pteroplatus sellatus.**

Pteroplatus sellatus, White, Cat. Col. Long. B. M. i. p. 82, t. 3. fig. 3 [1]; Bates, Trans. Ent. Soc. 1872, p. 192 [2].

Hab. MEXICO [1], San Gerónimo (*Champion*); NICARAGUA, Chontales (*Belt* [2]).

Differs from *Pt. quadriscopulatus* in the form of the thorax, which is trapezoidal, with nearly straight sides, instead of bulging in the middle. The colours are nearly the same.

3. **Pteroplatus octocostatus.**

Subtriangularis, elytris mox ab humeris gradatim ampliatis, apice minus obtuse rotundatis. Niger, brevissime pilosus, subtus (thorace fulvo excepto) niger, pedibus nigro-piceis; supra pallide fulvus, thorace lineolis duabus brevibus elytris fere dimidio postico nigro-violaceis; thorace parvo lateribus medio distincte angulatis; scutello nigro; elytris utrinque costulis angustis quatuor, quarum prima obliqua paulo post medium suturam attingit; inter 2^{m} et 3^{m} costula postica incompleta, ibique superficie reticulata; antennis ♀ brevissimis, breviter pilosis; femoribus paullo incrassatis, haud pedunculatis.

Long. 6½ lin. ♀.

Hab. MEXICO (*Boucard*).

The form of body is similar to that of *Pt. lycoides*; but the elytra are more broadly dilated, and the thorax is relatively smaller, besides wanting the constriction at the base which is seen in that and other species of the genus. The large number of narrow and sharp elevated lines of the elytra are also a distinguishing character of *Pt. octocostatus*.

4. **Pteroplatus pallidus.**

Pteroplatus pallidus, Thomson, Class. Long. p. 255.

Hab. MEXICO.

CRIOPROSOPUS.

Crioprosopus, Serville, Ann. Soc. Ent. Fr. 1834, p. 53 ; Dupont, Mag. Zool. 1838, Monogr. Trachyd. p. 53.

Callona (partim), Waterhouse, Trans. Ent. Soc. ii. p. 228 (1840).

This is another of the handsome genera of Cerambycidæ characteristic of Central America and the adjoining regions. Eight species have previously been described, none of which extends further beyond the zone included in the scope of this work than Texas on the one hand and Colombia on the other. The Texan species (*C. rimosus*) differs in some essential points from its congeners.

1. **Crioprosopus servillei.**

Crioprosopus Servillei, Serville, Ann. Soc. Ent. Fr. 1834, p. 54; Dupont, Mag. Zool. 1838, Cl. ix. p. 53, t. 217 [1].

Hab. Mexico, interior [1].

2. **Crioprosopus nietoi.**

Crioprosopus Nieti, Chevrolat, Rev. et Mag. Zool. 1857, p. 103, t. 6. f. 1.

Hab. Mexico (*Nieto*).

3. **Crioprosopus saundersi.**

Crioprosopus Saundersii, White, Cat. Col. Long. B. M. i. p. 79.

Hab. Mexico.

4. **Crioprosopus iridescens.**

Crioprosopus iridescens, White, Cat. Col. Long. B. M. i. p. 80 [1].

Hab. Guatemala (*Deby* [1]), Zapote (*Champion*).

Two specimens of this superb insect have been sent home by Champion, both females. I believe I am right in referring them to *C. iridescens*, White, of which the male only has been described. The colour of the elytra, however, is more intensely metallic, showing no trace of pale ferruginous ground-colour. The sculpture of the thorax is similar in the two sexes, thus differing greatly from the closely allied species *C. rimosus* of Texas, in which the male only has a thickly sculptured thorax (no smooth dorsal space being left), the female having the same part smooth, with only a few scattered punctures. On the authority of M. Sallé, *C. tricolor* (Waterh.) has been recorded as the female of *C. iridescens*; but *C. tricolor* differs greatly in the sculpture of the thorax, and belongs to quite a different section of the genus. The grooves of the third to fifth antennal joints described by White (in which the female specimens agree with the male) are a strong indication of affinity with *C. rimosus*, which has in both

sexes similarly grooved joints. There is no difference of colour between the sexes of *C. rimosus*.

5. Crioprosopus basileus.

Oblongus, valde elongatus, rufo-castaneus, infra griseo-sericeus, elytris splendide viridi-æneis subtilissime sparsim punctatis, hic illic transverse rugatis; thorace valde transverso, lateribus post medium tubere magno subconico, dorso creberrime punctato, linea lata dorsali lævi, antice dilatata et post dilatationem iterum angustata, juxta basin dilatata; mesosterno declivi.

Long. 17 lin. ♀.

Hab. Mexico, Oaxaca (*Fenochio*).

Very closely allied to *C. iridescens* ♀. It differs very little in colour, the red under surface and femora only being of a duller, castaneous hue, scarcely differing from the slightly darker tibiæ and sides of the mesosternum, and the elytra being greener and less golden, as well as very much less punctured and wrinkled. In form there are well-marked and important differences in the thorax and mesosternum. The sides of the former instead of being obtusely rounded are produced into a large and nearly conical tubercle; and the smooth dorsal line is *narrowed* instead of widened (as well described by White) behind the anterior dilatation. The mesosternum (between the legs) gradually slopes forward, and is not produced into a large tubercle with vertical anterior face as in *C. iridescens*.

6. Crioprosopus tricolor.

Callona tricolor, Waterhouse, Trans. Ent. Soc. ii. p. 228 (1840)[1].

Hab. Panama, Obispo (*Salvin*).—Venezuela?

The specimen taken by Mr. Salvin differs from that described by Waterhouse only by the amount of red colour on the sides and under surface of the thorax, the separate spots, as described, being united into a large lateral spot reaching nearly to the front margin and prolonged in a ring underneath the prothorax. The mesosternum is produced into a conical projecting tubercle.

7. Crioprosopus thoracicus.

Stenaspis thoracicus, White, Cat. Col. Long. B. M. i. p. 78[1].

Hab. Honduras (*Dyson*).

According to White, perhaps only a variety of *C. tricolor*.

8. Crioprosopus rutilans. (Tab. VI. fig. 3.)

Crioprosopus rutilans, Bates, Trans. Ent. Soc. 1869, p. 384, ♀[1], et 1872, p. 192.

Hab. Nicaragua, Chontales (*Belt*[1], *Janson*).

In the private collection of Mr. Belt (since acquired by Mr. Godman) there is a male specimen of this species. It is of the same colour as the female, except the narrower

ring of red on the femora and the presence of a red spot on the sides of the thorax under the tubercle. But the antennæ are twice the length of the body, the terminal joints especially being slender and greatly elongated, the eleventh as long as the ninth and tenth taken together. The thorax differs also in being covered on the sides and under surface with a dense and coarse punctuation. This sexual difference and the very prominent mesosternum appear to be distinctive characters of the group of *Crioprosopi* having polished metallic elytra; and the name *Callona* given by Waterhouse might be conveniently applied to it. The closely allied *C. viridipennis*, Latreille, from Colombia, was included in *Crioprosopus* by Dupont.

STENASPIS.

Stenaspis, Serville, Ann. Soc. Ent. Fr. 1834, p. 51; Dupont, Mag. Zool. 1838, Monogr. Trachyder. p. 50; Lacordaire, Gen. Col. ix. p. 171.

This genus is here restricted, according to the intention of the founders, to those species in which the prosternal process is produced at its upper edge and presents a vertical face to the mesosternum. Four species are known, restricted to Mexico and the bordering countries.

1. **Stenaspis verticalis.**

Stenaspis verticalis, Serville, Ann. Soc. Ent. Fr. 1834, p. 52; Dupont, Mag. Zool. 1838, Cl. ix. p. 57, t. 216. f. 1.

Hab. Mexico, Cuernavaca (*Höge*).—North America, Arkansas (*Leconte*).

2. **Stenaspis castaneipennis.**

Stenaspis castaneipennis, Dupont, Mag. Zool. 1838, Cl. ix. p. 52, t. 216. f. 2[1].

Hab. Mexico[1], Oaxaca (*Fenochio*).

3. **Stenaspis solitaria.**

Cerambyx solitarius, Say, Journ. Ac. Phil. iii. 1823, p. 410[1].
Stenaspis unicolor, Dupont, Mag. Zool. 1840, Cl. ix. p. 11, t. 38[1].

Hab. Mexico, Sonora.—North America, Arkansas[1], Kansas, Texas (*Leconte*).

4. **Stenaspis plagiata.**

Stenaspis plagiata, C. O. Waterhouse, Trans. Ent. Soc. 1877, p. 12[1].

Hab. Guatemala, near the city (*Salvin*[1]).

DELTASPIS.

Deltaspis, Serville, Ann. Soc. Ent. Fr. 1834, p. 7; Chevrolat, Journ. of Entom. i. p. 247.
Eudoxilus (Dej.), Lacordaire, Gen. Col. ix. p. 172.

As far as is at present known this genus is confined to Mexico. It is doubtful,

from Chevrolat's remarks on the type species and Serville's own description, whether Lacordaire's definition in the 'Genera' (ix. p. 172) applies strictly to the genus. *D. thoracica*, White, and the two new species described below agree, however, very well with the generic characters given by Serville.

1. **Deltaspis auromarginata.**

Deltaspis auromarginata, Serville, Ann. Soc. Ent. Fr. 1834, p. 8.

Hab. Mexico.

2. **Deltaspis thoracica.**

Deltaspis thoracica, White, Cat. Col. Long. B. M. i. p. 148.

Hab. Mexico.

3. **Deltaspis rubriventris.**

Elongata, cylindrica, breviter pilosa, nigra, elytris læte viridibus, femoribus, metasterno abdomineque rufis, thorace subæneo tincto; capite thoraceque grosse sparsim punctatis, hoc subquadrato, medio paullo latiore ibique utrinque tuberculo conico armato, disco quinquetuberoso; scutello triangulari haud elongato, grosse punctato, nigro; elytris confertissime subconfluenter punctatis; pedibus pilosis, tibiis posticis leviter dilatato-compressis; antennis ♂ dupla longitudine corporis, articulis 3°–10^{m} subæqualibus haud sulcatis, 11mo multo longiore appendiculato, prosterno apice paullo producto, verticali.

Long. 10–11 lin. ♂ ♀.

Hab. Mexico (*Boucard*).

4. **Deltaspis nigripennis.**

Subcylindrica, nigra, breviter pilosa, pronoto abdomineque coccineis; capite confluenter punctato; thorace convexo dorso obtuse tuberculato, disperse punctato, lateribus utrinque tuberculo conico, basi reflexo-marginato; elytris apice obtuse rotundatis, subcrebre subtiliter punctatis; prosterno apice verticali antennis ♀ corpore paullo longioribus, filiformibus, crebre punctatis, articulis 3°–11^{m} subæqualibus; scutello breviter triangulari.

Long. 8 lin. ♀.

Hab. Mexico (*Boucard*).

The bright red colour of the pronotum extends on each flank nearly to the anterior acetabula. The insect is shorter than *D. rubriventris*, and the punctuation of the elytra much finer; they are of a deep violet-black and slightly shining.

TRAGIDION.

Tragidion, Serville, Ann. Soc. Ent. Fr. 1834, p. 89.

Five species have been described, chiefly from the United States, one of them ranging as far north as Canada. One species only is exclusively Mexican.

1. **Tragidion annulatum.**

Tragidion annulatum, Leconte, Proc. Ac. Phil. 1858, p. 83 [1].

Hab. Mexico, Sonora [1].—North America, Lower California.

2. **Tragidion carinatum.**

Tragidion carinatum, Thomson, Class. Long. p. 204.

Hab. MEXICO.

PHŒNICUS.

Phœnicus, Lacordaire, Gen. Col. ix. p. 174.

The following is the only recorded species:—

1. **Phœnicus sanguinipennis.**

Phœnicus sanguinipennis, Lacordaire, loc. cit. nota; Dohrn, Stett. ent. Zeit. 1872, p. 161[1].

Hab. CENTRAL AMERICA[1].

Male and female found among the logwood cargo of a ship in Stettin harbour.

METALEPTUS.

Metaleptus, Bates, Trans. Ent. Soc. 1872, p. 192.

Five species of this genus have been described, all from Mexico and Central America except one, which I have not seen, and which is stated to be from Brazil.

1. **Metaleptus angulatus.** (*M. marginellus*, Tab. VI. fig. 8.)

Purpuricenus (?) *angulatus*, Chevrolat, Col. du Mexique, 4me fasc. 1834[1].

Metaleptus marginellus, Bates, Trans. Ent. Soc. 1872, p. 192[2].

Hab. MEXICO[1]; NICARAGUA, Chontales (*Belt*, *Janson*)[2].

Although not perfectly agreeing with Chevrolat's description, especially with regard to the "trois nervures longitudinales non entières" of the elytra, I have no doubt my *M. marginellus* is the same species as his *P. angulatus*. There is no difference worthy of note between Chontales and Mexican specimens which I have compared; and the surface of the elytra, although apparently very smooth and velvety, shows in certain lights traces of faint longitudinal raised lines, which may be the "nervures" described by the French author.

2. **Metaleptus binoculus.** (Tab. VI. fig. 7.)

Metaleptus binoculus, Bates, Trans. Ent. Soc. 1872, p. 193, nota.

Var. Fulvo-ochraceus, macula utrinque elongato-quadrata nigra.

Hab. MEXICO; NICARAGUA, Chontales (*Belt*, *Janson*).

Since describing this species from a single Mexican specimen, I have seen three others from Chontales, and all are females. As, on the other hand, all the *M. angulatus* (*marginellus*) I have had an opportunity of examining, five in number, are males, it is very possible they are the sexes of one and the same species. *M. binoculus*, besides

the different disposition of colours, differs constantly from *M. angulatus* in the sides of the thorax being armed with a very distinct conical tubercle instead of being simply angulated.

3. **Metaleptus coccinatus.**

Metaleptus coccinatus, Bates, Trans. Ent. Soc. 1872, p. 193.

Hab. NICARAGUA, Chontales (*Belt*).

The lateral tubercles of the thorax are long and pointed; and the elytra are separately rounded at the apex; the scutellum is red. The single example is a female, and possibly an extreme variety of *M. angulatus*.

4. **Metaleptus pyrrhulus.**

Minor, gracilis, niger, griseo-sericatus, thorace rufo-coccineo, maculis 4 dorsalibus nigris, elytris utrinque macula magna triangulari humerali rufo-coccinea, humeris ipsis nigris; capite rufo, fasciis verticis et occipitis nigris, abdomine sanguineo; thorace minus transverso, lateribus medio angulatis fere tuberculatis, dorso quinquetuberoso, reticulato, punctato; scutello nigro; elytris apice late truncatis margine apicali utrinque medio angulato, epipleuris verticalibus, dorso crebre punctulatis, punctis basin versus grossioribus; pedibus gracilibus, posticis valde elongatis tibiisque flexuosis; metasterno ventreque tenuiter griseo-pubescentibus, crebre punctulatis.

Long. 5 lin. ♂.

Hab. GUATEMALA, San Gerónimo (*Champion*).

This beautiful little species offers many peculiarities, but is undoubtedly congeneric with *Metaleptus*. The form and proportions of the antennal joints, shape of the sterna, head, and palpi, and the proportions of the legs and tarsi offer no difference worthy of note. The chief divergent features reside in the thorax and elytra,—the former being relatively narrower and longer, with very uneven convex surface and a central short ridge; the latter having vertical epipleuræ. The red colour of the head, thorax, and base of the elytra is very bright and silky under the lens, but opaque, owing to the closeness of the alveolated sculpture. The four black spots of the thorax (two obliquely placed on each side of the disk) are clothed with long black hairs, the central ridge remaining red. The scutellum is moderately elongated, little more so than in *M. angulatus*. The basal red part of the elytra is bounded very obliquely behind, the line commencing on the suture, not far from the scutellum, and terminating on the sides at nearly two thirds the length of the elytra, a narrow sutural border at the base and a humeral spot remaining black. The legs are very long, the hind thighs projecting much beyond the apex of the body, linear and briefly bidentate at the tip; the hind tibiæ are flexuous and rufous towards the tip; the hind tarsi are of the same elongated proportions, the lobes of the third joint narrow, and the soles densely hairy.

ÆTHECERUS.

Æthecerus, Chevrolat, Ann. Soc. Ent. Fr. 1862, p. 532.

Two species only are known of this distinct and beautiful North-American genus, one of which extends its range to Mexico.

1. Æthecerus wilsoni.

Arhopalus Wilsonii, Horn, Proc. Acad. Phil. xii. 1860, p. 570, t. 8. f. 4 [1].
Æthecerus Wilsonii, Lacordaire, Gen. Col. ix. p. 183, nota; id. Atlas, t. 94. f. 5.
Æthecerus Wilsoni, Chevrolat, Ann. Soc. Ent. Fr. 1862, p. 533 [2].

Hab. North America, Texas [1].—Mexico [2].

OXOPLUS.

Oxoplus, Leconte, Proc. Ac. Phil. xiv. 1862, p. 41; Lacordaire, Gen. Col. ix. p. 179.

According to Lacordaire's description, this genus is distinguished from its allies by the relatively short hind femora and tarsi, and the somewhat elongated scutellum. These features are passed under silence by Leconte; and the species he includes seem to resemble much in colour those of the genus *Metaleptus.* Four species have been described—three from Lower California and New Mexico, and one from Southern Mexico; a fifth is here added from the last-named region.

1. Oxoplus ornaticollis.

Oxoplus ornaticollis, Lacordaire, Gen. Col. ix. p. 180, nota; id. Atlas, t. 94. f. 4.

Hab. Mexico, Oaxaca.

2. Oxoplus pœcilus.

Elongatus, fere cylindricus, subtus dense fulvo-pubescens, capite nigro, thorace fulvo maculis quinque nigris; scutello modice elongato, apice attenuato, nigro; elytris fulvis, fascia subbasali antice utrinque ad humerum curvata latera haud attingente trienteque apicali nigris; antennis pedibusque nigris.
Long. $10\frac{1}{2}$ lin.

Hab. Mexico, Tehuantepec (*Sumichrast*).

Much resembling the figure given by Lacordaire of his *O. ornaticollis*, but differing in the much less prominent thoracic tubercles, the broader scutellum, and the black marks of the thorax, these latter consisting (instead of three vittæ) of five spots, two in a line on each side and one near the base in the middle. The under surface is densely clothed with long silky pubescence of a golden-tawny hue, the episterna of the meso-thorax being black. The elytra are very closely punctured, coarsely at the base, more minutely towards the apex; and there are two faint elevated lines down the middle of each.

TYLOSIS.

Tylosis, Leconte, Journ. Ac. Phil. ser. 2, ii. p. 9 (1850).

Three species are known, from Mexico and the region of North America immediately adjoining.

1. **Tylosis maculata.**

Tylosis maculatus, Leconte, loc. cit. p. 9; Col. of Kansas and Eastern New Mexico, p. 20, t. 2. f. 15 [1].

Hab. North America, New Mexico [1].—Mexico (*Sallé*).

Mexican specimens differ constantly from Leconte's figure above cited, in the central black spot of the elytra being oblique instead of transverse, and in the scutellar spot forming a large black patch surrounding the scutellum; in both the humeral spot is sometimes wanting.

2. **Tylosis oculata.**

Tylosis oculatus, Leconte, loc. cit. p. 9 [1].

Hab. Mexico [1].

3. **Tylosis sellata.**

Tylosis sellatus, Leconte, Journ. Ac. Phil. iv. 1, 1858, p. 25 [1].

Hab. North America, Texas.—Mexico, Sonora.

I have received a specimen of this distinct species in a collection said to have been made in Sonora.

CROSSIDIUS.

Crossidius, Leconte, Journ. Acad. Phil. ser. 2, ii. p. 102 (1850); Smithson. Misc. Coll. no. 264, pt. ii. p. 196.

Of similar form to *Tylosis*, but without the supplementary (12th) antennal joint which distinguishes that genus. The species, as a rule, are remarkable for their dense and somewhat long pubescence. Like *Tylosis* and many nearly allied genera it is restricted to the southern and western regions of North America, including the northern parts of Mexico. Eight species have been described from the United States.

1. **Crossidius palmeri.**

Elongatus, fere cylindricus, niger, griseo-hirtus; elytris fulvis vel rufis, margine basali macula elongata, vittaque suturali, apice subito dilatata, nigris; thorace ♂ subglobuloso, grosse et crebre punctato, interdum rufo-maculato, ♀ angustiore sparsius punctato linea dorsali lævi; subtus abdomine fulvo, basi plus minusve nigro.

Long. $5\frac{1}{2}$–6 lin. ♂ ♀.

Hab. Mexico, Alvarez Mountains (*Dr. Palmer*).

The elytra are marked almost the same as in *Cr. discoideus* (Say); *i. e.* the sutural

black spot commencing a short distance behind the scutellum (to which it is sometimes joined by a narrow black sutural edging) forms a long broad sutural vitta with straight sides until near the apex, where it is suddenly dilated to the lateral margin. The black basal fascia is variable in width. The punctuation of the elytra is coarse, and becomes scarcely finer towards the apex; but the punctures are more separated near the base, and dense or even confluent near the apex. The prothorax is black beneath in all the specimens.

2. **Crossidius trivittatus.**

Minus elongatus, niger, longe hirsutus, elytris fulvis vitta communi suturali alteraque discoidali (apicem haud attingente) cyaneo-nigris; antennis ♂ fere dupla corporis longitudine, basi sparsim ciliatis, articulo ultimo cæteris longiore apice curvato; thorace subquadrato vix rotundato, dorso grossissime discrete punctato, calloso, callo discoidali ovali lævi; scutello breviter triangulari; elytris passim modice punctatis, lineis paullo elevatis sublævibus utrinque duabus, apice obtuse subtruncatis.

Long. $5\frac{1}{2}$ lin. ♂.

Hab. MEXICO (*Truqui*).

Differs from the rest of its congeners in the elevated lines of the elytra, which, although only rudimentary, indicate a relationship with *Mannophorus*, *Ischnocnemis*, and other genera distinguished by raised ivory-like stripes on these organs; the resemblance is increased by the rudimentary lines being in the centre of the two yellowish vittæ which alternate with the blue-black stripes of the elytra. The thorax is acutely margined at the base, the lateral (posterior) angles showing an acute projection similar to that which is exhibited in an exaggerated degree in *Entomosterna* and allied genera. The long tawny hairs with which the body and legs are densely clothed, the declivous mesosternum, short hind tarsi, and equilateral triangular scutellum induce me to place the species in *Crossidius*.

MANNOPHORUS.

Mannophorus, Leconte, Proc. Acad. Phil. 1853, p. 442.

A genus restricted, as far as at present known, to Northern Mexico and Texas. It is very closely allied to other small generic groups from the same region.

1. **Mannophorus lætus.**

Mannophorus lætus, Leconte, loc. cit. p. 442[1].

Hab. NORTH AMERICA, Texas [1].—MEXICO, Alvarez Mountains (*Dr. Palmer*).

The species was sent to me authentically named by Dr. Horn of Philadelphia.

2. **Mannophorus ferreus.**

Subcylindricus, ænescenti-niger, breviter griseo pubescens; thorace lateribus regulariter rotundatis, supra grossissime confluenter punctato, interdum rufo maculato; elytris utrinque costa elevata lævi apicem

haud attingente, interspatiis creberrime punctatis, apice obtuse truncato; epipleuris verticalibus, a dorso linea sublævi demarcatis; antennis ♀ corpore multo brevioribus, articulo tertio distincte longiore, 1°–5^{m} scabroso-punctatis, 6°–11^{m} cano-sericeis; mesosterno declivi; pedibus brevibus, tarsis posticis articulo primo sequentibus duobus haud longiore.

Long. 6 lin. ♀.

Hab. MEXICO, San Luis Potosi, Alvarez Mountains (*Dr. Palmer*).

The antennæ of the female are much shorter than in the corresponding sex of *M. lætus*; and the scutellum, though broad, is more acutely pointed behind; otherwise the generic characters are very similar in the two species. The raised line of the elytra is narrow and well defined; but the absence of a pale stripe accompanying it gives a different facies to the insect from that of *M. lætus* and other allied species.

ISCHNOCNEMIS.

Ischnocnemis, Thomson, Système Céramb. p. 199 (1864).

The single Mexican species on which this genus was founded is closely allied to *Mannophorus*, the chief difference lying in the greater length of the basal joint of the hind tarsi and the attenuated pointed apex of the scutellum. The species is much larger, however, and relatively longer, with longer antennæ. Leconte places *Ischnocnemis* in his group *Tyloses*, on account of the alleged truncated apex of its mandibles. I find both mandibles acutely pointed; and as he further states that the genus has a protuberant in contradistinction to a sloping mesosternum, which is not the case, it is to be inferred that he has wrongly identified it.

1. **Ischnocnemis costipennis.**

Ischnocnemis costipennis, Thomson, loc. cit. p. 199.

Hab. MEXICO.

2. **Ischnocnemis minor.**

Angusta, elongata, ænescenti-nigra, elytris costis eburneis duabus elevatis apicem fere attingentibus, interspatiis crebre æqualiter punctulatis, apice rotundato; thorace antice distincte angustato, dorso inæquali crebre confluenter punctato; scutello basi lato, apice subelongato acuto; antennis ♀ corpore vix longioribus; tarsis posticis articulo primo duobus sequentibus vix longiore; corpore subtus chalybeo, nitido, fere nudo, discrete punctato.

Long 5½ lin. ♀.

Hab. MEXICO (*Boucard*).

Female much more slender than the corresponding sex of *I. costipennis*, from which it differs conspicuously in colour, being of deep brassy or chalybeous black (very shining beneath), whilst the female of *I. costipennis* is pale testaceous red. The insect bears some resemblance to *Sphenothecus cyanicollis*.

SPHENOTHECUS.

Sphænothecus, Dupont, Mag. Zool. 1838, Cl. ix. p. 55.

Lacordaire suggested that *S. cyanicollis*, Dup., should be detached from this genus and formed into a new one; and Leconte proposed to refer it to *Entomosterna*: the latter author proposed further to divide the remainder of the genus into two; but, after a careful examination of many of the allied forms, I think it preferable to retain *Sphenothecus* as Dupont first defined it. The genus relies, then, for its unity more upon the vertical front of the mesosternum, the elongated scutellum, and short posterior tarsi than on the raised lines of the elytra and the form of the thorax. Eight species are now known, all from Mexico and the adjoining countries, north and south.

1. **Sphenothecus tomentosus.**

Sphænothecus tomentosus, Dupont, Mag. Zool. 1838, Cl. ix. p. 56, t. 219. f. 1 [1].

Hab. Mexico, Oaxaca [1].

2. **Sphenothecus trilineatus.**

Sphænothecus trilineatus, Dupont, Mag. Zool. 1838, Cl. ix. p. 57, t. 219. f. 2 [1].

Hab. Mexico, Jalapa (*Höge*); Guatemala, Tocoy, 6000 feet (*Champion*).

3. **Sphenothecus bivittatus.**

Sphænothecus bivittatus, Dupont, Mag. Zool. 1838, Cl. ix. p. 58, t. 230. f. 1 [1].
Leptocera bilineata, Gory, Icon. R. A. Ins. t. 45. f. 9.

Hab. North America, Texas.—Mexico [1].

The antennæ in the males of this species have twelve joints.

4. **Sphenothecus picticornis.**

Sph. bivittato proxime affinis et similis, sed differt antennarum articulis 4°–12^{m} dimidio basali flavo-rufis. Niger, nitidus, subtus ochraceo-pubescens; thorace sparsim punctato lateribus griseo-hirtus, dorso macula rufa; elytris utrinque vittis duabus elevatis eburneis, interspatiis depressis punctulatis; antennis ♂ 12-articulatis, longitudine plusquam dupla corporis, articulo tertio robusto; femoribus tibiisque basi castaneo-rufis.

Long. 7 lin. ♂.

Hab. Mexico.

The basal lobes of the elytra are still more advanced towards the thorax than in *S. bivittatus*; and the scutellum is rather more elongated.

5. **Sphenothecus argenteus.**

Elongatus, postice minus angustatus, niger, nitidus, subtus lateribus argenteo-tomentosis; thorace medio rotundato ibique (♀) breviter tuberculato, dorso punctato-strigoso medio antice carinato, basi depressa et lobata, lateribus utrinque vitta lata argenteo-tomentosa; scutello angustissimo, elongato; elytris apice breviter truncatis, basi utrinque modice lobatis, dorso utrinque carinis eburneis duabus juxta

apicem fere conjunctis, interspatiis subtilissime punctulatis, sutura argenteo-pilosa; mesosterno antice elevato, conico; tarsis brevibus, latis; antennis ♂ 11-articulatis, articulo 11mo longissimo.

Long. 8 lin. ♂ ♀.

Hab. GUATEMALA, San Gerónimo (*Champion*).

6. **Sphenothecus funebris.**

Robustus, postice vix attenuatus, nigerrimus, subtus nitidus, capite, thorace, antennis pedibusque nigro-hirtis; thorace antice angustato, medio utrinque tuberculo conico, basi vix lobato; scutello basi lato depresso, apice longe attenuato; elytris utrinque vittis elevatis eburneis duabus juxta apicem conjunctis, exteriore versus basin nigra, interspatiis rugoso-punctulatis; mesosterno valde porrecto; antennis (♀) corpore multo brevioribus, robustis.

Long. 8 lin. ♀.

Hab. GUATEMALA, Cachil (*Champion*).

Mr. Champion has at present sent home only one example of this fine species.

7. **Sphenothecus cyanicollis.**

Sphænothecus cyanicollis, Dupont, Mag. Zool. 1838, Cl. ix. p. 59, t. 220. f. 2.

Hab. MEXICO.

MUSCIDORA.

Muscidora, Thomson, Syst. Céramb. p. 202 (1864); Lacordaire, Gen. Col. ix. p. 186.

The following is the only recorded species:—

1. **Muscidora tricolor.**

Muscidora tricolor, Thomson, loc. cit. p. 202.

Hab. MEXICO.

ENTOMOSTERNA.

Entomosterna, Chevrolat, Ann. Soc. Ent. Fr. 1862, p. 752; Lacordaire, Gen. Col. ix. p. 187.

This is another of numerous genera of the present group characteristic of the entomological fauna of Mexico and neighbouring region. Five species have been described, two of which are also found a little further south, in Guatemala or Nicaragua.

1. **Entomosterna cruentata.**

Entomosterna cruentata, Chevrolat, loc. cit. p. 753 [1].

Hab. MEXICO, Toxpan [1], Jalapa (*Höge*).

2. **Entomosterna sanguiniventris.**

Entomosterna sanguiniventris, Chevrolat, loc. cit. p. 754 [1].

Hab. MEXICO (*Sallé*) [1].

3. **Entomosterna eburata.**

Entomosterna eburata, Chevrolat, loc. cit. p. 755 [1].

Hab. MEXICO, Yucatan, Soledad (*Sallé* [1]), Almolonga (*Höge*).

4. **Entomosterna trucidata.**

Entomosterna trucidata, Chevrolat, loc. cit. p. 755 [1]; Bates, Trans. Ent. Soc. 1873, p. 224 [2].

Hab. MEXICO, Yucatan, Merida (*Pilate* [1]); NICARAGUA, Chontales (*Belt* [2]).

5. **Entomosterna miniatocollis.**

Entomosterna miniatocollis, Chevrolat, loc. cit. p. 756 [1].

Hab. MEXICO, Oaxaca (*Sallé* [1]).

CYPHOSTERNA.

Cyphosterna, Chevrolat, Ann. Soc. Ent. Fr. 1862, p. 756; Lacordaire, Gen. Col. ix. p. 188.

According to Lacordaire the following is the only species really belonging to this genus, the others described by Chevrolat belonging probably to the genus *Gambria.* All are unknown to me.

1. **Cyphosterna quadrilineata.**

Cyphosterna quadrilineata, Chevrolat, loc. cit. p. 757 [1].

Hab. MEXICO, Yucatan (*Pilate* [1]).

GAMBRIA.

Cyphosterna, sect. *Gambria,* Chevrolat, Ann. Soc. Ent. Fr. 1862, p. 760; Lacordaire, Gen. Col. ix. p. 189.

One species only, from Brazil, was referred by Chevrolat to *Gambria* as a section of *Cyphosterna.* Lacordaire, on the other hand, proposed to limit *Cyphosterna* to those species in which the second ventral segment of the male was abnormally lengthened. As he knew only one of Chevrolat's species which possessed this character, he referred the rest doubtfully to *Gambria,* a view which we provisionally follow. The species are very rare in collections; two were described by Chevrolat from Mexico and three from Brazil and Bolivia. To these I am able to add one from Sonora.

1. **Gambria emarginata.**

Cyphosterna emarginata, Chevrolat, loc. cit. p. 758 [1].

Hab. MEXICO, Yucatan (*Pilate* [1]).

2. **Gambria bicolor.**

Cyphosterna bicolor, Chevrolat, loc. cit. p. 758 [1].

Hab. MEXICO, Playa Vicente (*Boucard* [1]).

3. **Gambria leucozona.**

Elongato-oblonga, glabra, subnitida, subtus flavo-testacea, meso- et metasterno medio nigris; capite et antennis nigris; thorace flavo-testaceo macula magna dorsali nigra; scutello et elytris nigris, his fascia lata mediana (ad suturam anguste interrupta et antice emarginata) albo-testacea; thorace transverso, quadrato, tuberculo laterali conico, dorso medio convexo versus basin utrinque tuberoso, media basi depresso,

sparsissime punctato; scutello parvo, triangulari; elytris apice late sinuatim truncatis, dorso lævibus sparsim punctulatis; mesosterno producto, conico; abdominis segmento apicali latissimo; femoribus posticis extus unicarinatis.

Long. 9 lin. ♂.

Hab. Mexico, Sonora.

Apparently closely resembling *G. bicolor*, which is smaller (15 millims., =7 lines), and has an entirely yellow thorax. The carinated hind femora is one of the characters mentioned by Lacordaire as distinguishing the genus *Gambria* from *Cyphosterna*.

PLEUROMENUS.

Pleuromenus, Bates, Trans. Ent. Soc. 1872, p. 194.

Two species only are at present known of this peculiar genus, both from Nicaragua.

1. **Pleuromenus baccifer.** (Tab. VI. fig. 4.)

Pleuromenus baccifer, Bates, loc. cit. p. 194 [1].

Hab. Nicaragua, Chontales (*Belt* [1]).

2. **Pleuromenus semicostatus.**

Pleuromenus semicostatus, Bates, loc. cit. p. 194 [1].

Hab. Nicaragua (*Reakirt* [1]).

BATYLE.

Batyle, Thomson, Syst. Céramb. p. 201; Lacordaire, Gen. Col. ix. p. 131; Leconte, Smithson. Miscell. Coll. no. 265, pt. ii. p. 314.

Eriphus (partim), Haldeman et Leconte, Cat. Col. United States, 1853, p. 104.

Callideriphus (partim), White, Cat. Col. Long. B. M. ii. p. 296.

A genus hitherto supposed to be peculiar to the United States, whence four species have been recorded, one occurring at considerable elevations in Colorado. The following South-Mexican species is perfectly congeneric, approaching nearest *B. ignicollis* (Say):—

1. **Batyle meridionalis.**

Subcylindricus, brevissime setosus; capite thoraceque coccineis, occipite nigro, elytris, antennis pedibusque nigris, femoribus basi coxisque rufis, corpore subtus medio rufo lateribus nigris; thorace dorso opaco alveolato utrinque tumido, margine basali acute marginato angulis posticis acutis; scutello nigro-velutino; elytris apice oblique truncatis passim creberrime punctulatis; antennis corporis apicem attingentibus, articulo tertio cæteris distincte longioribus; pedibus posticis cum tarsis valde elongatis.

Long. 5–6½ lin. ♂.

Hab. Mexico, Tehuantepec (*Sumichrast*).

ERIPHUS.

Eriphus, Serville, Ann. Soc. Ent. Fr. 1834, p. 88; Chevrolat, Ann. Soc. Ent. Fr. 1862, p. 747; Lacordaire, Gen. Col. ix. p. 190.

Eleven species of this genus, as defined by Lacordaire, are known, all peculiar to Tropical America. The majority occur in Brazil.

1. **Eriphus mexicanus.**

Eriphus mexicanus, Serville, Ann. Soc. Ent. Fr. 1834, p. 89.
Eriphus unipunctatus, Buquet in Guér. Icon. R. A. iii. p. 226.

Hab. MEXICO.

2. **Eriphus prolixus.** (Tab. VI. fig. 15.)

Eriphus prolixus, Bates, Trans. Ent. Soc. 1872, p. 193 [1].

Hab. NICARAGUA, Chontales (*Belt* [1]).

BASIPTERA.

Basiptera, Thomson, Syst. Céramb. p. 204 (1864).

The following is the only recorded species:—

1. **Basiptera castaneipennis.**

Basiptera castaneipennis, Thomson, loc. cit. p. 205.

Hab. MEXICO.

DENDROBIAS.

Dendrobias, Serville, Ann. Soc. Ent. Fr. 1834, p. 41.

This conspicuous genus, belonging to the *Trachyderini* group, the peculiar and conspicuous type of colouring of which it shares, is another of the characteristic Longicorn forms of Mexico and the adjoining regions. Two species are known.

1. **Dendrobias mandibularis.**

Dendrobias mandibularis, Serville, Ann. Soc. Ent. Fr. 1834, p. 41; Dupont, Mag. Zool. 1836, p. 23, t. 151. f. 1.
♀. *Dendrobias quadrimaculatus*, Dupont, loc. cit. p. 22, t. 151. f. 2.
Var. *Dendrobias testaceus*, Dupont, loc. cit. p. 24, t. 152. f. 1.

Hab. NORTH AMERICA, Lower California (*Leconte*).—MEXICO, Paso del Macho (*Höge*).

2. **Dendrobias maxillosus.**

Dendrobias maxillosus, Serville, Ann. Soc. Ent. Fr. 1834, p. 44; Dupont, Mag. Zool. 1836, p. 25, t. 152. f. 2 [1]; Bates, Trans. Ent. Soc. 1872, p. 234 [2].

Hab. NICARAGUA, Chontales (*Belt* [2]).—WEST INDIES, Martinique [1].

The species taken by Mr. Belt, in the female sex only, is certainly distinct from *D. mandibularis*. It is narrower and more convex, as Dupont describes it; and the third joint of the antennæ is shorter. In colour it resembles the pale variety figured by Dupont, but shows no darker markings at the base of the elytra.

TRACHYDERES.

Trachyderes, Dalman in Schönherr, Syn. Insect. r. iii. p. 364; Lacordaire, Gen. Col. ix. p. 201.

About fifty species of this highly characteristic American genus have been described. Its range extends from the basin of the La Plata to Mexico; but it has not yet been recorded from the United States or from Chili. Judging from the diversity of the specific forms, South Brazil appears to be the centre of distribution of the genus, the species being few and little varied in Central America and Mexico.

1. Trachyderes succinctus.

Cerambyx succinctus, Linnæus, Mus. Lud. Ulr. p. 72.
Trachyderes succinctus, Bates, Trans. Ent. Soc. 1870, p. 430.
Trachyderes cayennensis, Dupont, Mag. Zool. 1836, Monogr. des Trachyd. p. 34, t. 156. f. 1.

Hab. Panama.—South America, Venezuela, Guiana, Amazons region.

2. Trachyderes subpilosus.

Trachyderes elegans, var., Bates, Trans. Ent. Soc. 1872, p. 195 [1].

T. succincto similis, maris thorace minore elytrisque postice minus angustatis, scutello basi angustiore; corpore subtus (præcipue pectore) piloso, tibiis posticis apice nigris. Elongato-oblongus, castaneus nitidus, elytris medio fascia albo-testacea; antennis articulis 4°–11^{m} dimidio basali fulvis, interdum articulis 4° et 7° immaculatis; corpore subtus variabili; pedibus fulvis, femoribus et tibiis apice castaneo-fuscis.

Long. 7–11 lin. ♂ ♀.

Hab. Honduras, Rio Hondo (*Blancaneaux*); Nicaragua, Chontales (*Belt* [1], *Janson*); Costa Rica, Irazu (*Rogers*).

This species or local form is more nearly allied to *T. elegans* than to any other of the species or subspecies belonging to the *succinctus* group of this difficult genus. But almost the sole structural character which distinguishes both from the South-American type species is the narrower scutellum, which is only noticeable when the specimens are very attentively compared. The long brown erect hairs with which the under surface of the body, especially the breast, is clothed is certainly a good character, but is only visible in well-preserved specimens. The general form of the body is somewhat different in average individuals, especially of the male; but there are some in which this difference is not at all perceptible. I have never seen, however, in the best-developed males of *T. subpilosus* and *elegans* the robust form which corresponding individuals of *T. succinctus* assume, with their voluminous thorax, thick and rough basal joints of the antennæ, and tapering elytra. The colour of the hind tibiæ is subject to rare exceptions: in the majority the apex is dark brown, whilst in the true

Guiana *succinctus* the tibiæ are unicolorous tawny yellow like the abdomen. With regard to the distinction of *T. subpilosus* from *T. elegans*, it is almost exclusively one of colouring; and some specimens approach the tawny hue, with black borders to the white fascia of the elytra, which distinguishes *T. elegans*.

3. **Trachyderes elegans.**

Trachyderes elegans, Dupont, Mag. Zool. 1836, Monogr. des Trachyd. p. 30, t. 154. f. 1[1].

Hab. Mexico [1], Jalapa (*Höge*).

4. **Trachyderes interruptus.**

Trachyderes interruptus, Dupont, loc. cit. p. 38, t. 158. f. 2; Bates, Trans. Ent. Soc. 1872, p. 195[1].

Hab. Nicaragua, Chontales (*Belt*)[1].—South America, Ecuador.

This is probably a variety only, in which the white fascia is reduced in size and broken into two transverse spots on each elytron. The variation in the elytral belt apparently occurs in both *T. succinctus* and *subpilosus*, the Nicaraguan specimen having the narrow scutellum of *T. pilosus*; whilst a South-American specimen I have seen has a scutellum rather broader at the base and resembling *T. succinctus*.

5. **Trachyderes hilaris.** (Tab. VI. fig. 13.)

T. eleganti affinis, at differt elytris fasciis duabus (altera basali altera mediana) maculaque apicali flavis; rufo-vel fusco-castaneus, antennis articulis 4°–6^{m} basi, 10° et 11° toto fulvis; thorace culmine transverso haud recto, leviter curvato; scutello ut in *T. succincto* basi latiore; pedibus flavis, femoribus apice et tibiis tarsisque posticis toto fusco-castaneis.

Long. 9 lin.

Hab. Costa Rica (*Van Patten*); South America, Ecuador.

In its variegated elytra and in size resembling *T. signatus* of South Brazil, but differing totally from that species in the form of the thorax, which is not essentially different from that of *T. succinctus* and immediate allies, the central transverse ridge only being more curved (with the concavity towards the head). A specimen taken by Buckley in Ecuador differs in no essential point from a Costa-Rican example in Mr. Godman's collection.

LISSONOTUS.

Lissonotus, Dalman in Schönherr, Syn. Insect. I. iii. p. 364.

Eighteen species of this distinct and highly characteristic Tropical-American genus have been recorded. It is more strictly tropical than *Trachyderes*, no species having been yet found as far south as the Argentine territory, where *Trachyderes* is well represented. The only Central-American species is the following:—

1. **Lissonotus multifasciatus.**

Lissonotus multifasciatus, Dupont, Mag. Zool. 1836, Monogr. des Trachyd. p. 10, t. 143. f. 3[1].

Lissonotus flavocinctus (Dupont), Bates, Trans. Ent. Soc. 1872, p. 234[2].

Hab. MEXICO [1], Cordova (*Höge*); GUATEMALA, San Gerónimo (*Champion*); NICARAGUA, Chontales (*Belt*).

The Nicaraguan specimens belong to the Mexican form rather than to the Colombian (*flavocinctus*, Dupont), between which I fail to detect any other constant difference than the punctuation, *L. multifasciatus* being rather more thickly and strongly punctured than *L. flavocinctus*.

MEGADERUS.

Megaderus, Serville, Ann. Soc. Ent. Fr. 1834, p. 57.

Three species are known—one from Tropical South America and two from Central America and Texas.

1. **Megaderus bifasciatus.**

Megaderus bifasciatus, Dupont, Mag. Zool. 1836, Monogr. des Trachyd. p. 5, t. 141. f. 2 [1].
Megaderus corallifer, Newman, Mag. Nat. Hist. ser. 2, iv. p. 195 (1849).

Hab. NORTH AMERICA, Texas.—MEXICO [1].

2. **Megaderus latifasciatus.** (Tab. VI. fig. 9.)

Megaderus latifasciatus, Bates, Trans. Ent. Soc. 1870, p. 438 [1].

Hab. NICARAGUA, Chontales (*Belt*, *Janson* [1]).

Fam. LAMIIDÆ.

The family Lamiidæ is not susceptible of division into subfamilies having any approximation towards equality of rank with those I have proposed for the Prionidæ and the Cerambycidæ. As the genera and species, however, are exceedingly numerous and range themselves for the most part around certain tolerably definite type forms, of lower rank than the subfamilies just alluded to, I here adopt a system of "groups" as a convenient arrangement for bringing together these evidently natural assemblages. The groups will be an amplification of the "subtribes" which I proposed and defined in treating of the Lamiadæ of the Amazons valley (Ann. & Mag. Nat. Hist. ser. 3, viii. July 1861), and not equivalent to the "groupes" of Lacordaire's 'Genera des Coléoptères,' although, for facility of reference, I follow the order of succession established in the 'Genera.'

Group **DORCADIONINI.**

There seems to me no valid distinction between the two "groupes" Dorcadidides and Parménides of Lacordaire. Of the two characters mentioned by him, the first (the form of the intercoxal projection of the basal ventral segment) is inconstant; and the second (the oblique outer groove of the middle tibiæ) rests on mistaken observation, at

any rate in the species of *Phrynidius* (Dorcadidides), to which the existence of a groove is denied by him: the groove exists, although low down on the shanks. The fundamental character of the existence of an epistome, or rather the exposure of the basal piece of the labrum, by which Lacordaire distinguishes three separate "groupes" of Dorcadionini, does not possess that absolute importance which he attributed to it, several species of true *Dorcadion* (*D. humerale*, Gebl., and allies, also a new species from Peking) showing the basal piece as distinctly as do the Parménides. All these "groupes" of Lacordaire may therefore be fused into one. But from this his Hexatrichides, I think, ought to be separated, as belonging to quite a different type. The Dorcadionini require further to be purified by the withdrawal of certain genera wrongly, as I think, admitted by Lacordaire and other authors into the group, e. g. *Parmenonta* and *Mesolita*.

PHRYNIDIUS.

Phrynidius, Lacordaire, Gen. Col. ix. p. 262.

This genus, peculiar to Mexico and Central America, is closely allied to *Microtragus*, an Australian form agreeing in the shape of the head and in the insertion of the antennæ. Lacordaire, however, placed the two genera in different "groupes." The intercoxal process is of similar form in both. Three species are now known, two of which are new.

1. **Phrynidius singularis.**

Elongato-ovatus, tomento subsquamoso fusco vestitus; capite retracto; antennis basi valde approximatis, ab oculis longe distantibus, corpore brevioribus, scapo elongato subcylindrico, articulis 3^io^ et 4^to^ elongatis; thorace elongato, fere cylindrico, lateribus post medium tuberosis, dorso gibboso, tota superficie grossissime rugosa; elytris elongato-ovatis, humeris nullis, grosse punctatis, utrinque tuberculis magnis circiter duodecim subseriatis; pedibus modice elongatis, femoribus versus apicem paullo incrassatis; tibiis intermediis juxta apicem oblique sulcatis; onychiis minus divaricatis.

Long. $5\frac{1}{2}$ lin.

Hab. GUATEMALA, San Gerónimo (*Champion*).

The pro- and mesosternal processes are both strongly arched. The intercoxal process is obtusely rounded at the apex. The metathoracic episterna are wholly concealed by the sides of the elytra, which tightly envelop the flanks of the trunk and have a simple, narrow, and almost perfectly straight margin without thickened rim. The middle acetabula are open externally; but, notwithstanding, the epimera do not intrude within the opening. The antennæ are almost contiguous at their base, the antenniferous tubers being short and vertical at the summit of the long trapezoidal forehead. The scape is long and nearly of equal thickness throughout; the third joint is a little longer than the scape, and the fourth about a third shorter than the third, the two together being about one third the length of the whole antenna. The eyes are very narrow, nearly divided, and coarsely granulated.

2. **Phrynidius echinus.**

Minus elongatus, tomento compacto squamoso fusco vestitus, sparsim distincte punctatus; capite retracto; antennis basi approximatis, ab oculis distantibus, scapo curvato, articulo tertio maxime elongato, quarto breviore, cæteris brevissimis æqualibus; thorace minus elongato, medio paullulum dilatato-rotundato, disco convexo plurinodoso; elytris ovalibus, humeris nullis, utrinque tuberculis circiter duodecim subseriatis; tibiis intermediis extus juxta apicem oblique sulcatis.

Long. 4 lin.

Hab. Guatemala, San Juan, Sabo, Vera Paz (*Champion*).

More oval than *P. singularis*; thorax much shorter and its surface more even, marked with a few distinct punctures; the elytra also smoother between the conical tubercles and more regularly punctured. The antennæ are different in the proportions of their joints, the scape being much shorter, while the third and fourth joints are much longer, being together as long as all the rest of the antennæ, the fourth less than half the length of the third, which latter is half as long as the scape. At the base they are not so closely approximated, and for that reason less distant from the eyes.

3. **Phrynidius inæqualis.**

Moneilema inæqualis, Say, Bost. Journ. Nat. Hist. i. 1835, p. 193 [1].
Phrynidius inæqualis, Lacordaire, Gen. Col. ix. p. 262.

Hab. Mexico [1], Jacale, Volcan de Orizaba (*Sallé*).

Nearly of the same size as *P. echinus*, but much narrower and differing by the thorax being covered with irregular elevations and by the scape of the antennæ being longer than the second and third joints together.

MONEILEMA.

Moneilema, Say, Journ. Ac. Phil. iii. 2, p. 403 (1824).
Collapteryx, Newman, Entom. Mag. v. p. 397 (1838).
Monilema, Leconte, Journ. Ac. Phil. ser. 2, ii. p. 167 (1852).

This genus is the North-American representative of the Palæarctic *Dorcadion*, and is nearly confined to the western and southern regions of the continent, one species only being found so far east as the State of Missouri. The species are numerous in Mexico; but it is exceedingly probable that many of those described are only varieties, some of them being variable in punctuation and in the amount of pale tomentum with which, especially on the upper surface, they are variegated. If we may judge by the form of the thoracic tubercles and the humeral angles of the elytra, and disregard sculpture and tomentose markings, the following eight would constitute only one variable species—*C. carinatum*, *Lecontei*, *lævidorsale*, *albopictum*, *infamiæ*, *perforatum*, *mortuale*, and *sinistrum*.

1. **Moneilema blapsides.**

Collapteryx blapsides, Newman, Entom. Mag. v. p. 397 (1838) [1].

Hab. Mexico [1].

The insect described by Newman is of large size (one inch), and distinguished by the scattered punctuation of the head and thorax as well as the whole surface (except the apex) of the elytra. The form of the thoracic tubercles and humeral angles of the elytra is not mentioned. An example in M. Sallé's collection, named as a variety of *M. variolare*, agrees very well with this description, as far as it goes. It is from Mexico.

2. **Moneilema carinatum.**

Moneilema carinatum, Thomson, Arch. Ent. i. p. 189 (1857); id. Classif. Long. p. 24 [1].

Hab. Mexico [1], Etla, near Oaxaca (*Sallé*).

3. **Moneilema lecontei.**

Moneilema Lecontei, Thomson, Classif. Long. p. 25.

Hab. Mexico.

4. **Moneilema lævidorsale.**

Moneilema lævidorsale, White, Proc. Zool. Soc. 1856, p. 407.

Hab. Mexico, San Juan, Tehuacan (*Sallé*).

5. **Moneilema albopictum.**

Moneilema albopictum, White, Proc. Zool. Soc. 1856, p. 407, t. 40. fig. 7.
Moneilema albotessellatum, Thomson, Arch. Ent. i. p. 189 (1857).

Hab. Mexico, Puebla (*Sallé*).

6. **Moneilema infamiæ.**

Moneilema infamiæ, Thomson, Physis, i. p. 79 [1].

Hab. Mexico, Toluca [1].

7. **Moneilema perforatum.**

Moneilema perforatum, Thomson, Physis, i. p. 80.

Hab. Mexico.

According to M. Sallé, this is synonymous with *M. Lecontei* of the same author.

8. **Moneilema mortuale.**

Moneilema mortuale, Thomson, Physis, i. p. 80.

Hab. Mexico.

9. **Moneilema sinistrum.**

Moneilema sinistrum, Thomson, Physis, i. p. 81 [1].

Hab. MEXICO, Cucuasaca [1], Puebla (*Sallé*).

Differs from *M. albopictum* in nothing except its rather more elongate and parallel form of body.

10. **Moneilema variolare.**

Moneilema variolare, Thomson, Physis, i. p. 77.

Hab. MEXICO, city [1] (*Flohr*). San Luis Potosi, Hacienda de Bleados (*Dr. Palmer*).

Group **MONOHAMMINI.**

This group in a natural arrangement would comprise at least two of Lacordaire's "groupes," viz. Monohammides and Batocérides, the degree of completeness of the cicatrice of the antennal scape, on which the author of the 'Genera' relied for the separation of the two, proving to be much more irregular than he believed it to be.

The group contains a large number of genera, consisting nearly all of large and beautiful species; but they are chiefly confined to the tropical and warmer regions of the Old World, being especially abundant in the Indian and Malayan regions. Out of fifty known genera, only six occur in Tropical America; and of these three are almost restricted to Central America and the neighbouring countries north and south.

PTYCHODES.

Ptychodes, Serville, Ann. Soc. Ent. Fr. 1835, p. 76.

Nine species are known.

1. **Ptychodes trilineatus.**

Cerambyx trilineatus, Linnæus, Mantiss. p. 532; Drury, Ill. i. p. 91, t. 41. f. 1.
Saperda vittata, Fabricius, Gen. Ins. Mant. p. 231; Spec. Ins. i. p. 233; Syst. El. ii. p. 322.

Hab. NORTH AMERICA, Southern States.—MEXICO, Plan del Rio (*Höge*); BRIT. HONDURAS, Rio Hondo (*Blancaneaux*); NICARAGUA, Chontales (*Belt, Janson*); COSTA RICA (*Rogers*).—WEST INDIES; SOUTH AMERICA, Colombia and Venezuela; OCEANIA, Tahiti (var. *insularis,* Fairmaire).

2. **Ptychodes hondurae.**

Ptychodes hondurae, White, Proc. Zool. Soc. 1858, p. 412 [1].
Tæniotes trivittatus, Taschenberg, Zeitschr. f. d. gesammt. Naturwiss. 1870, i. p. 194 [2].

Hab. MEXICO, Oaxaca (*Salle*), Honduras; PANAMA, Chiriqui (*Ribbé*).—SOUTH AMERICA, Colombia, Ecuador [2]

The Honduras type specimen, and one in M. Sallé's collection from Oaxaca, differ from Panama and South-American specimens in the more neatly defined sutural and lateral vittæ of the elytra.

3. **Ptychodes cretatus.** (Tab. VII. fig. 2.)

Ptychodes cretatus, Bates, Trans. Ent. Soc. 1872, p. 197[1].

Hab. NICARAGUA, Chontales (*Belt*[1]); COSTA RICA, Cache (*Rogers*).

The tomentose spots in fresh specimens are pale sulphur-yellow, and not chalky white as originally described from worn examples.

4. **Ptychodes dejeani.**

Ptychodes Dejeanii, Thomson, Syst. Céramb. p. 556.

Hab. MEXICO.

5. **Ptychodes niveisparsus.** (Tab. VII. fig. 1.)

Ptychodes niveisparsus, Bates, Trans. Ent. Soc. 1872, p. 197, nota [1].

Hab. PANAMA (*Macleannan* [1]).

6. **Ptychodes lecontei.** (Tab. VII. fig. 3.)

Ptychodes Lecontei, Thomson, Rev. Zool. 1856, p. 477, t. 24. f. 1 [1]; Bates, Trans. Ent. Soc. 1872, p. 197 [2].

Hab. NICARAGUA, Chontales (*Belt* [2], *Janson*); COSTA RICA [1], Cache (*Rogers*).

The majority of the specimens collected at Chontales and in Costa Rica show a nearly immaculate and polished disk of each elytron, except the characteristic chalky-white streak towards the base. This constitutes the typical form; but Mr. Belt obtained from special localities varieties in which the disk is almost as much spotted as in *P. niveisparsus*. The varieties retain the sutural and (narrow) marginal vittæ; they are as follows:—

Var. *a*.

Elytris disco guttis plurimis parvis discretis, lineatim digestis, versus apicem evanescentibus, vittula antico-discoidali nulla; antennis ab articulo quarto piceo-rufis.

Hab. NICARAGUA, Acoyapo (*Belt*).

Var. *b*.

Elytris disco guttis numerosis, plerumque in vittas confluentibus, usque ad apicem continuatis.

Hab. NICARAGUA, Huaca (*Belt*), S.W. Yucatan (*Dr. Horn*).

7. **Ptychodes mixtus.**

P. lecontei valde affinis, at differt corpore distincte breviore vittaque marginali elytrorum latiore et a margine recedente. Niger, politus, occipite lineis niveis duabus approximatis usque ad thoracis basin continuatis; elytris vittis suturali et marginali alteraque interrupta discoidali niveis, vitta marginali lata postice a margine remota.

Long. 9 lin.

Hab. PANAMA, Chiriqui (*Ribbé*).

8. **Ptychodes alboguttatus.**

P. lecontei var. *a* similis, sed elytris apice ut in *P. polito* simpliciter acuminatis. Niger, vittis duabus contiguis a vertice usque ad elytrorum apicem extensis, alteraque latiore laterali ab oculo per elytrorum latera usque ad suturæ apicem ducta, pallide sulphureis; elytris disco guttis atomisque numerosis inspersis; corpore subtus griseo, pectore et abdomine lateraliter sulphureo-vittatis; antennis nigris, ab articulo 4^to^ rufescentibus.

Long. 10 lin. ♂.

Hab. MEXICO, Juquila, Oaxaca (*Sallé*).

A distinct species. The lateral yellow vitta of the elytra runs very close to the lateral margin the whole length to the apex.

9. **Ptychodes politus.**

Ptychodes politus, Serville, Ann. Soc. Ent. Fr. 1835, p. 75 [1]; Castelnau, Hist. Nat. Anim. Art. ii. p. 480, t. 33. f. 5.

Tæniotes lineatus, Newman, Ent. Mag. v. p. 497 (1838).

Hab. MEXICO [1]; GUATEMALA, San Juan, Vera Paz (*Champion*).

TÆNIOTES.

Tæniotes, Serville, Ann. Soc. Ent. Fr. 1835, p. 90.

Eighteen species of this characteristic Tropical-American genus have been described. It does not appear to extend into temperate latitudes (except in the anomalous case of one species introduced into the Azores), but is represented in the West-Indian Islands.

1. **Tæniotes scalaris.**

Lamia scalaris, Fabricius, Spec. Ins. i. p. 213.

Tæniotes suturalis, Thomson, Arch. Ent. i. p. 172 [1].

Tæniotes scalaris, Bates, Trans. Ent. Soc. 1872, p. 197.

Hab. MEXICO [1], Plan del Rio (*Höge*); GUATEMALA, Zapote (*Champion*); NICARAGUA, Chontales (*Belt*, *Janson*); COSTA RICA, Cache (*Rogers*); PANAMA, Chiriqui (*Ribbé*).

Tæniotes univittatus, Taschenburg, Zeitschr. f. d. gesammt. Wissensch. 1870, i. p. 195, from Venezuela, is a slight local variety of this species, in which there is an additional sulphur-yellow spot under each humeral angle of the elytra. *T. scalaris* may be always

distinguished from the allied species *T. amazonum* and *cayennensis* by the distinct spine at the sutural apex of the elytra.

2. **Tæniotes præclarus.** (Tab. VII. fig. 11.)

Tæniotes præclarus, Bates, Trans. Ent. Soc. 1872, p. 197[1].

Hab. NICARAGUA, Chontales (*Belt*[1], *Janson*).—COLOMBIA; ECUADOR.

3. **Tæniotes inquinatus.**

Tæniotes inquinatus, Thomson, Arch. Ent. i. p. 171[1].

Hab. COSTA RICA, Rio Sucio (*Rogers*).—COLOMBIA[1].

4. **Tæniotes xanthostictus.** (*Tæniotes luciani*, Tab. VII. fig. 10.)

Tæniotes Luciani (Thomson), Bates, Trans. Ent. Soc. 1872, p. 198[1].

T. luciani (Thoms.) affinis, at differt maculis lineisque lætius flavis, scutello quoque tenuiter flavo-lineato nec toto flavo. Elongatus, elytrorum apice suturali paullulum producto; corpore subtiliter brunneo-tomentoso, linea suboculari, altera tenui per medium thoracis et scutelli, vitta laterali corporis, elytrorumque maculis utrinque discoidalibus rotundis et guttulis passim inspersis, læte flavis.

Long. 12–15 lin. ♂ ♀.

Hab. NICARAGUA, Chontales (*Belt*[1], *Janson*).

Although the amount of difference between this and the Mexican *T. luciani* is not great, its constancy, as displayed in the large number of specimens taken at Chontales, makes it necessary to distinguish the form by a separate name. Besides the tenuity of the dorsal yellow line of the thorax and scutellum, and the brighter colour of the line and other stripes and spots, the ground-colour of the body shows a constant difference in shade, and the elytra are more distinctly produced at the sutural angle of the apex.

5. **Tæniotes luciani.**

Tæniotes Buquetii, Thomson, Ann. Soc. Ent. Fr. 1856, p. 324, t. 8. f. 1[1].
Tæniotes Luciani, Thomson, Arcana Nat. p. 96 (1859).

Hab. MEXICO[1].

M. Thomson rightly changed the name he originally proposed, on account of its having been employed in the closely allied genus *Hammoderus*.

DELIATHIS.

Deliathis, Thomson, Class. Long. p. 101 (1860); Lacordaire, Gen. Col. ix. p. 323.

Six species of this genus are known, all, except one, from Central America and the warmer parts of Mexico. The only exception (*D. quadritæniata*, White) is from Venezuela and Ecuador. The species are amongst the largest and most beautiful of Tropical-American Longicornia. They are distinguished from *Tæniotes* and *Hammoderus* by their style of coloration and the form of the head, the sides of which behind

the eyes are straight instead of rounded and convex. From *Tæniotes* they are further distinguished by the apical ventral segment being destitute of spiniform projection at the angles.

1. **Deliathis incana.**

Cerambyx incanus, Forster, Nov. Ins. Sp. Cent. i. p. 38 (1771).
Lamia vittator, Fabricius, Syst. Entom. p. 173 (1775) [1].
Cerambyx vittator, Olivier, Ent. no. 67, p. 73, t. 15. f. 104.

Hab. Mexico, Bay of Campeche [1].

2. **Deliathis buqueti.**

Tæniotes Buquetii, Tasle, Rev. Zool. 1841, p. 14 [1].

Hab. Mexico, Vera Cruz [1].

3. **Deliathis pulchra.**

Deliathis pulchra, Thomson, Syst. Céramb. p. 554 [1].

Hab. Mexico [1], Cosamaloapam (*Sallé*); Guatemala (*Sallé*).

Lacordaire suggested that this might be a variety of *D. buqueti*. It differs only in the grey and white vittæ being absent, the glabrous black integument occupying their place. A Guatemala specimen in M. Sallé's collection has traces of grey tomentum in the position of the vittæ.

4. **Deliathis nivea.** (Tab. VII. fig. 9.)

Deliathis nivea, Bates, Trans. Ent. Soc. 1869, p. 388 [1].

Hab. Nicaragua, Chontales (*Belt* [1], *Janson*).

5. **Deliathis pœcilodryas.**

Tomento sordide albo passim vestita, tuberculis thoracis dorsalibus tribus spinaque laterali, elytrorum guttis numerosis discretis (juxta basin tubercula obtusa formantibus) nigris, nitidis; capite thoraceque quam in cæteris speciebus latioribus, elytrisque versus apicem paullo minus attenuatis, apice ad suturam paullulum dehiscentibus et breviter acute spinosis; mesosterno minus prominulo.

Long. 18 lin. ♀.

Hab. Mexico, Mirador, province Vera Cruz (*Sallé*).

One example of this distinct species is in M. Sallé's collection. The spots on the elytra are innumerable and pretty equally sprinkled over the whole surface; they vary in size, but are never so large as the black spots of *D. nivea*.

HAMMODERUS.

Hammoderus, Thomson, Class. Long. p. 98; Lacordaire, Gen. Col. p. 324.

Similar in range to the genus *Deliathis*, being nearly confined to Central America and

Mexico, one or two species only having as yet been detected in the north-western parts of South America. The head is very similar in shape to that of *Tæniotes*; but the unarmed angles of the terminal ventral segment amply distinguish the genus. Seventeen species are now known.

1. **Hammoderus spinipennis.** (Tab. VII. fig. 7.)

Hammoderus spinipennis, Thomson, Class. Long. p. 100 (1860)[1]; Bates, Trans. Ent. Soc. 1872, p. 198[2].

Hab. Mexico[1], Cordova, Vera Cruz (*Sallé*); Nicaragua, Chontales (*Belt*[2], *Janson*).

2. **Hammoderus thoracicus.**

Tæniotes thoracicus, White, Ann. & Mag. Nat. Hist. ser. 3, ii. p. 275 (1858)[1].

Hab. Mexico?—South America?[1]

According to the type specimen this species is very closely allied to *H. spinipennis*, but sufficiently distinct, the crown of the head having two divergent white lines and the lateral white lines being much broader than in *H. spinipennis*.

3. **Hammoderus albatus.**

H. spinipenni affinis, rufescenti-fusco tomentosus, thorace maculis disci, elytris plagis difformibus (una maxima ante, altera minore post medium, tertiaque parva ante apicem) cretaceo-albis; corpore subtus immaculato; elytris apice utrinque dentiformibus haud distincte spinosis.

Long. $12\frac{1}{2}$ lin. ♂.

Hab. Costa Rica, Cache (*Rogers*).

Agrees with *H. spinipennis* and *H. thoracicus* in the immaculate base of the elytra; but it differs in the thorax wanting the short lateral line, and in having, instead, white spots or small patches in the centre of the disk. The spots of the elytra are also different, although similar in position: they are of the purest white; and the antemedian spot forms a large irregular patch, more or less connected with smaller neighbouring spots; the postmedian and subapical spots differ only in being a little longer than in the above-named species.

4. **Hammoderus nitidus.** (Tab. VII. fig. 8.)

Hammoderus nitidus, Bates, Trans. Ent. Soc. 1873, p. 224[1].

Hab. Nicaragua, Chontales (*Belt*[1]).

5. **Hammoderus rubefactus.** (Tab. VII. fig. 4.)

Hammoderus rubefactus, Bates, Trans. Ent. Soc. 1872, p. 199[1].

Hab. Nicaragua, Chontales (*Belt*[1]).

6. **Hammoderus inermis.**

Tæniotes (*Hammoderus*) *inermis*, Thomson, Arch. Ent. i. p. 173 (1857)[1].
Hammoderus inermis, Thomson, Class. Long. p. 99.
Tæniotes albiplagiatus, White, Ann. & Mag. Nat. Hist. ser. 3, ii. p. 275 (1858)[1].
Hammoderus inermis, Bates, Trans. Ent. Soc. 1872, p. 198[2].

Hab. Mexico[1], San Andres Tuxtla (*Sallé*); Nicaragua, Chontales (*Belt*[2]).

7. **Hammoderus maculosus.**

H. inermi affinis, sed major, elytrisque apice distincte et fortiter spinosis. Elongatus, ochraceo-fuscus, thoracis dorso vittis interruptis tribus, elytrisque utrinque maculis majoribus quinque (quarum una basali) præterea guttis numerosis, cretaceis; corpore subtus (prothorace, metasterno ventreque) lateribus cretaceo maculato.

Long. 13–15 lin. ♂.

Hab. Nicaragua, Chontales (*Belt*).

Closely allied to *H. albiplagiatus*, White (=*inermis*, Thoms.), from which it differs by its greater size and more elongate shape, by the apices of the elytra forming distinct though stout spines, and by the more numerous and longer spots of the elytra. On each elytron there are five large white or yellowish-white spots, one at the base, one on the side before the middle, and another on the side behind the middle, sometimes united to the fourth spot on the disk a little nearer the base, and, lastly, a rather elongate spot near the apex. Besides these larger spots, which are nearly of equal size, there are many smaller ones scattered over the surface. The elytra are very scantily and faintly punctured; and the granulations near the base are smaller than in other species. The central white vitta of the thorax is slender, and sometimes reduced to two linear spots; the lateral vitta is broader, and sometimes reaches, without interruption, the anterior margin.

8. **Hammoderus elatus.** (Tab. VII. figg. 5 ♀, 6 ♂.)

Hammoderus elatus, Bates, Trans. Ent. Soc. 1872, p. 199[1].

Hab. Nicaragua, Chontales (*Belt*[1], *Janson*).

9. **Hammoderus thiodes.**

Rufescenti-fuscus, thorace utrinque linea abbreviata elytrisque singulis maculis quinque sulphureis, his basi crebrius punctato-granulatis, apice utrinque acute dentatis; ventre maculis parvis lateralibus flavis.

Long. 11 lin. ♂.

Hab. Panama, Chiriqui (*Ribbé*).

Clothed with finer and more silky tomentum, and of a more purplish-brown hue than the other species. The clear sulphur-yellow spots are more clearly defined, there being no spots of intermediate size between the five ovate ones and the few minute specks which are scattered over the surface. One of the five spots (as in *H. inermis* and allies)

is basal; the second is lateral and before the middle; the third is on the disk behind the middle, the fourth near the lateral margin behind, and the fifth near the apex.

10. **Hammoderus impluviatus.**

Hammoderus impluviatus, Lacordaire, Gen. Col. ix. p. 324 [1].

Hab. Guatemala [1].

11. **Hammoderus lacordairei.**

Hammoderus Lacordairei, Thomson, Class. Long. p. 98 [1].

Hab. Mexico, Vera Cruz [1], Cordova (*Sallé*).

Closely allied to *H. nitidus*, but differing in its shorter apical spines, which are, besides, much nearer the suture of the elytra. The light patches and spots of the elytra are also more numerous.

12. **Hammoderus sallæi.**

Hammoderus sallei, Thomson, Class. Long. p. 99 [1].

Hab. Mexico [1], Oaxaca (*Sallé*).

13. **Hammoderus imperator.**

Hammoderus imperator, Thomson, Physis, ii. p. 100.

Hab. Mexico.

14. **Hammoderus pollinosus.**

Robustus, minus cylindricus, tomento flavescente vestitus, subtus griseo-niger maculis lateralibus flavis, antennis pedibusque nigris; elytris amplis, apice rotundatis, dorso planiusculis, basi parce granulatis, dorso parcissime punctulatis.

Long. 18 lin. ♀.

Hab. Costa Rica, Rio Sucio (*Rogers*).

This fine species differs from its congeners in showing scarcely any trace of dentiform prolongation of the apices of the elytra. Its colour and markings are also different, the white upper surface being clothed with ochreous-yellow tomentum, quite uniform, except that there are traces of patches of slightly darker shade on the elytra.

15. **Hammoderus lunaris.**

In hoc genere angustissimus; rufescenti-fuscus, tenuiter parce pubescens, elytris atomis fulvis, plaga circumscutellari vittaque conspicua mediano-laterali valde intus curvata, cinereis; thorace angusto, spina laterali acutissima paullo ante medium, dorso tuberculis duobus obtusis vittisque abbreviatis tribus fulvis; elytris apice conjunctim rotundatis, ad suturam breviter spinosis, dorso passim haud profunde inconspicue punctulatis, humeros versus crebre asperatis, prope scutellum grossius discrete punctatis; antennis ♂ tenuibus, corpore triplo longioribus; corpore subtus immaculato; mesosterno angusto, declivi.

Long. 10 lin. ♂.

Hab. Mexico (*Sallé*).

One example in M. Sallé's collection.

MIMOLOCHUS.

Mimolochus, Thomson, Physis, ii. p. 99.

An exclusively Mexican genus, perfectly distinct from the preceding, and more nearly allied to genera of the Old World. One species only is yet known:—

1. **Mimolochus hœpfneri.**

Mimolochus Hœfneri, Thomson, Syst. Céramb. p. 554; Physis, ii. p. 100.
Mimolochus Hœpfneri, Harold & Gemminger, Cat. Col. p. 3022.

Hab. Mexico.

MONOHAMMUS.

Monohammus, Serville, Ann. Soc. Ent. Fr. 1835, p. 91 (*Monochamus*, err. typ.).

Deducting the numerous species belonging to the genus *Dihammus*, Thomson (which Lacordaire included in *Monohammus*), and the species of Tropical Africa (which are generically distinct by the narrowness of the cicatrice of the antennal scape), the genus *Monohammus* is confined to such species of the heterogeneous assemblage comprehended in recent works as are closely allied to the European and North-American members enumerated by Serville and Lacordaire. To these naturally belong also a few from Eastern Asia and India. About twenty species of true *Monohammus* have been described. The following is the first yet recorded from America south of the United States:—

1. **Monohammus rubigineus.**

M. clamatori (Leconte) affinis. Ferrugineo-fuscus, subtus ferrugineo-lanuginosus; vertice vittis duabus approximatis et thorace vittis abbreviatis quatuor fulvis, elytris maculis numerosis ex parte confluentibus tomentosis fulvo-ferrugineis; thorace latius cylindrico, transversim ruguloso; elytris passim aspere punctatis (juxta suturam vix rugulosis), apice ad suturam paullo productis; antennis rufescenti-fuscis.

Long. $8\frac{1}{2}$–$9\frac{1}{2}$ lin. ♂ ♀.

Hab. Mexico (*Sallé*).

Two examples in M. Sallé's collection. The species is very closely allied to the Californian *M. clamator*, having similar spots of close rust-coloured tomentum scattered over the elytra. It is, however, a much broader insect, less wrinkled on the elytra, and has the under surface of the body densely clothed with long woolly hairs.

Group **APOMECYNINI.**

The Old-World genus *Apomecyna* forms an easily-recognized and distinct type in the Lamiadæ, uniting a cylindroidal form of body and unarmed thorax with subparallel tarsal claws, sinuate external edge of the tibiæ, and especially a short antennal scape, suddenly thickened on the outer side from the base, and entire at the apex. The more

typical genera are further recognizable by the general form of the antennæ, which are shorter than the body and have the terminal joints from the fifth much abbreviated, closely fitted together, with the end joint pointed. In some of the genera, however, the antennæ are lengthened, being considerably longer than the body. The degree of dehiscence of the middle haunch-sockets is variable; and the mesosternal epimera are sometimes very short, not reaching the aperture of the sockets. This structure seems to have misled Lacordaire, who gives, in some of the genera, the middle sockets ("cavités cotyloïdes") as closed, which they are not in reality. Owing partly to this and partly to his habit of regarding geographical distribution as a group-character, he was led to divide the Apomecynini unnecessarily into numerous minor groups.

PARMENONTA.

Parmenonta, Thomson, Physis, ii. p. 157; Lacordaire, Gen. ix. p. 273.

Lacordaire referred this genus to the Dorcadionini, owing to the superficial similarity of its species to the *Parmenæ*. He had not, at that time, noticed the systematic value of the degree of divergence of the tarsal claws; otherwise he could not have failed to recognize the true affinities of the genus. *Parmenonta*, in fact, is connected by insensible gradations with *Adetus* (=*Agennopsis*, Thoms., Lac.). It is sufficiently distinct, however, by its shortened metasternum (and consequent approximation of the two hinder pairs of legs) and the more or less dilated or suboval form of the elytra. Five species are now known, from South Brazil, Central America, and Mexico; it has not yet been recorded from the northern parts of Tropical South America.

Lacordaire describes the elytra as soldered together, which is not the case: they are free; and the under wings are present. He says also that the intermediate tibiæ have neither groove nor sinus on their outer edge: this also is not strictly exact; they have a shallow sinus, fringed with the usual longish hairs, near the apex. The same tibiæ in *P. valida* have also a tooth-like projection at their inner apices, a structure more strongly pronounced in the male than in the female; it is not seen, however, in the other species.

The group appears to have a real affinity with *Parmena*, but a much closer one with the Xylotolini, an interesting group consisting chiefly of Antarctic forms, which has not yet been systematically defined.

1. **Parmenonta valida.** (*Adetus validus*, Tab. VIII. fig. 3.)

Parmenonta valida, Thomson, Physis, ii. p. 158[1].

Hab. Mexico[1], Cordova (*Sallé*); Guatemala, San Juan, Vera Paz (*Champion*); British Honduras, Belize (*Blancaneaux*); Nicaragua, Chontales (*Belt*).

Some of the Central-American specimens have a distinctly longer metasternum than

the typical Mexican examples, and they seem to be also decidedly more cylindrical in form; but in every other respect there is no difference.

2. **Parmenonta ovatula.**

Minus elongata, oblongo-ovata, ochraceo-fusca; elytris lateribus rotundatis, apice utrinque breviter sinuatis, angulo suturali acuto, vix seriatim punctulatis, postice fortiter convexis, macula transversa ochracea; scutello latissimo, angulis rotundatis; pedibus brevibus, præcipue tibiis gradatim dilatatis, apice intus haud dentatis.

Long. $4\frac{1}{2}$ lin.

Hab. GUATEMALA, Zapote (*Champion*).

Shorter; the elytra, especially, relatively shorter and more ovate than in *P. valida*. The head and thorax coarsely punctured; the elytra punctured with less regularity than in *P. valida*, the punctures being larger and smaller, as in that species, but without much tendency to range in lines. At the base the elytra are scarce perceptibly wider than the base of the elytra; but the shoulders are rather distinct, and the sides are gradually rounded outwards to two thirds the length, and then more rapidly rounded to the sutural apex, near which the margin is slightly sinuated; the pale spot lies transversely across the disk at two thirds the length; and there is another, less distinct, similar pale spot near each shoulder. The tibiæ are shorter, and more triangular in shape than in *P. valida*. The mesosternum is plane and not at all prominent; the middle cotyloid cavities are distinctly open; and the mesothoracic epimera reach to the opening.

3. **Parmenonta minor.**

P. ovatulæ quoad formam similis, at angustior elytrisque minus late rotundatis, obscurius nigro-fusco pubescens, grossius punctata; thoracis lateribus et macula minore elytrorum pone medium obscure ochraceis: fusco-subæneo-nigra; thorace elongato, cylindrico; elytris paullulum rotundato-dilatatis apice juxta suturam triangulariter emarginatis; tibiis gradatim dilatatis, intermediis extus ante apicem distincte sinuatis.

Long. $3\frac{1}{2}$–$3\frac{3}{4}$ lin.

Hab. MEXICO, Jalapa (*Höge*).

4. **Parmenonta albisetosa.**

P. ovatulæ affinis, sed minor, elytris relative longioribus, mox a basi paullulum dilatato-rotundatis, longe ante apicem gradatim angustatis: subæneo-fusca, fusco-pubescens, punctata; elytris (præcipue postice) setarum albarum fasciculis ornatis, apice singulatim rotundatis; tibiis vix dilatatis, intermediis parum extus sinuatis.

Long. $2\frac{1}{4}$–$3\frac{1}{2}$ lin.

Hab. GUATEMALA, Dueñas, 4950 feet (*Salvin*), Dueñas, Capetillo (*Champion*).

Closely allied to *P. minor* and *P. ovatula*, but distinguished in both sexes by the form of the elytra, which in *P. albisetosa* are dilated (very slightly) immediately from the base, and commence again to taper immediately after the middle, whilst in the

other two species they are nearly parallel at first for a short distance and do not diminish again in width till shortly before the apex. The consequence of this difference in the curvature of the sides is that the greatest width of the elytra falls a little nearer the middle in *P. albisetosa* than it does in the allied species. Together with this difference of form, there is a distinguishing character in the clothing of the surface, furnished by the small pencils of short white bristles, which are conspicuous in *P. albisetosa* but are not noticeable in the other two species.

ADETUS.

Adetus, Leconte, Journ. Ac. Nat. Sci. Phil. ser. 2, ii. p. 161 (1852).
Agennopsis, Thomson, Arch. Ent. i. p. 302 (1857).
Talæpora, Fairmaire, Ann. Soc. Ent. Fr. 1859, p. 521.
Tautoclines, Thomson, Physis, ii. p. 155 (1868).

Distinguished from *Parmenonta*, to which it is very closely allied, by the metasternum being of normal length. The species have no longer any resemblance in form to *Parmena* and the Dorcadionini. Including *Tautoclines* (admitted, with some reservation, by Lacordaire, but which possesses no points of difference applicable to the extensive series of species now known), the genus is a large one, including more than a score of species, all peculiar to America and ranging from Chili in the south to Mexico in the north. *A. analis*, recorded from Pennsylvania, is said by Leconte to be a South-American insect. The species of Central America are numerous, and varied in form and markings.

1. **Adetus muticus.** (Tab. VIII. fig. 4.)

Agennopsis mutica, Thomson, Arch. Ent. i. p. 302 (1857).
Agennopsis pygæa, Bates, Ann. & Mag. Nat. Hist. ser. 3, xvii. p. 295 (1866).
Agennopsis mexicanus, Thomson, Physis, ii. 153 (1868) [1].
Adetus muticus, Bates, Trans. Ent. Soc. 1872, p. 234 [2].

Hab. Mexico [1]; Guatemala, San Gerónimo (*Champion*); Nicaragua, Chontales (*Belt* [2]).—South America, Cayenne to South Brazil.

2. **Adetus costicollis.** (Tab. VIII. fig. 5.)

Adetus costicollis, Bates, Trans. Ent. Soc. 1872, p. 199 [1].

Hab. Nicaragua, Chontales (*Belt* [1]).

The mesosternal prominence is less advanced than in *A. muticus*, and is strongly sulcated in the middle.

3. **Adetus griseicauda.**

Tautoclines griseicauda, Bates, Trans. Ent. Soc. 1872, p. 199 [1].

Hab. Nicaragua, Chontales (*Belt* [1]).

The mesosternum is plane, as in *Tautoclines*; but the anterior part of the prosternum is fitted for the reception of the head (which thus rests on the anterior haunches) much more completely than in *Adetus validus*. The two chief characters adduced for the genus *Tautoclines* are thus proved not to go together. The elytra in *A. griseicauda* are rotundate-dilated before the apex; and the apex itself has no trace of emargination or truncature.

4. **Adetus scissicauda.** (*Tautoclines scissicauda*, Tab. VIII. fig. 1.)

Tautoclines scissicauda, Bates, Trans. Ent. Soc. 1873, p. 225 [1].

Hab. NICARAGUA, Chontales (*Belt* [1]).

The degree of prominence of the mesosternum having proved an unimportant character, this species must be considered an *Adetus*, with which it agrees in general form and facies, as also in the shape of its prosternum, the anterior part of which is hollowed out to receive the head in repose; the lateral angles of the cavity thus formed are dentiform, as in the typical species.

5. **Adetus strigulatus.**

A. scissicaudæ proxime affinis, at differt elytrorum apice fusco necnon mesosterno valde convexo. Cylindroideus, ochraceo-fuscus, thorace atro-fusco et ochraceo lineato, elytris autem plaga elongata utrinque guttulisque atrofuscis lineolisque pallidis; thorace sparsim modice punctatis; elytris lineatim punctatis, apice ad suturam conjunctim emarginatis; antennis dimidio apicali nigris.

Long. $2\frac{3}{4}$–4 lin.

Hab. GUATEMALA, near the city (*Salvin*), Zapote (*Champion*).

6. **Adetus binotatus.** (*Tautoclines binotata*, Tab. VIII. fig. 2.)

Tautoclines binotata, Thomson, Physis, ii. p. 155 [1]; Bates, Trans. Ent. Soc. 1872, p. 234 [2].

Hab. MEXICO [1] (*Boucard*); NICARAGUA, Chontales (*Belt* [2]).

I can see no difference between Chontales and Mexican specimens except in the punctuation of the elytra, the punctures being more distinctly impressed in lines in the Mexican than in the Nicaraguan form. The shape of the elytra is similar in both—namely, elongate with the sides strictly parallel in the middle. The antennæ are of precisely the same form as in *Adetus muticus*; and the prosternum is shaped out in front to receive the head in repose, but is more oblique and plane than in the typical species.

7. **Adetus subellipticus.**

A. binotato simillimus, differt tantum elytris brevioribus magis ovatis lateribus medio leviter rotundatis. Subæneo-fuscus, subnitidus, ochraceo breviter pubescens, vitta lata thoracis laterali, macula transversa elytrorum postmediana vittulisque macularibus obliquis duabus (altera laterali versus basin, altera curvata prope apicem) ochraceis; crebre punctatus, punctis elytrorum dorso lineatim digestis; elytris apice breviter sinuatis, angulo suturali spiniformi, exteriore obtuso haud prolongato.

Long. $4\frac{3}{4}$ lin.

Hab. GUATEMALA, Zapote (*Champion*).

The numerous examples sent home by Champion differ constantly from equally numerous examples of *A. binotatus*, taken by Belt, in the relatively shorter and more ovate elytra. There is also a minor and less reliable difference in the mode of emargination of the apex of the elytra, the outer angle of which in *A. binotatus* is always more produced than the sutural, whilst in *A. subellipticus* the two angles are equal. The antennal joints, from the fifth, are whitish at the base, and there is a narrow whitish vitta on the lower flanks of the prothorax, in both species. The form of the pro- and mesosterna offers little difference.

8. **Adetus antennatus.**

Tautoclines antennata, Thomson, Physis, ii. p. 155 [1].

Hab. Mexico [1], Cordova (*Sallé*, *Boucard*).

Differs from *A. binotatus* by the broader form and darker tawny ochraceous colour of the vittæ on the elytra. The antennæ are also perceptibly shorter.

9. **Adetus leucostigma.**

A. binotato affinis, sed paulo minor et angustior, thorace fulvo trivittato, elytrisque macula postmediana clare alba. Elongatus, angustus, fuscus, tomento ochraceo-fusco vestitus; thorace grosse partim confluenter punctato, vitta lata laterali alteraque angustiore dorsali ochraceis; elytris medio parallelis, apice ad suturam conjunctim emarginatis, supra punctis oblongis seriatim ordinatis, fasciculis minutis maculaque utrinque transversa postmediana albis, lineola obliqua antica alteraque prope apicem ochraceis vel albis; antennis haud incrassatis, versus apicem nigris, articulis basi griseis; mesosterno arcuato.

Long. 3–4$\frac{1}{4}$ lin.

Hab. Mexico (*Sallé*); Guatemala, Chinantla, 4100 feet (*Salvin*), Zapote, San Gerónimo (*Champion*); British Honduras, Belize (*Blancaneaux*).

It is difficult by description to make clear the differences between this species and *A. binotatus*, the colour and markings being very similar. The two, however, are very distinct. *A. leucostigma* is a decidedly narrower insect, and is covered with coarser pubescence; the elytra are more gradually attenuated posteriorly, and the seriated punctures are more oblong.

10. **Adetus denticauda.**

A. binotato similis, sed differt elytris apice utrinque valde bidentatis etc. Elongatus, subcylindricus, subæneo-fuscus nitidus, vitta laterali thoracis utrinque versus medium elytrorum continuata, macula transversa post medium alteraque angustiore prope apicem ochraceo-tomentosis; capite thoraceque grosse punctatis (hoc linea dorsali ochracea); elytris parallelis, a medio usque ad apicem gradatim angustatis, apud apicem subito declivibus ibique grossissime punctatis suturaque elevata, apice ipso utrinque bidentato; antennis apicem versus paullo incrassatis; mesosterno inter coxas haud elevato.

Long. 3$\frac{1}{4}$–4$\frac{1}{4}$ lin.

Hab. Guatemala, Sabo, Vera Paz (*Champion*).

Differs from *A. binotatus* and all the preceding allied species by the ochraceous lateral vittæ of the thorax being continued to the humeral region of the elytra, whence they

extend (slightly curving) as a compact stripe to about one third the length of the elytra—the elytral part of the vitta in *A. binotatus* and allies being a broken, macular line. Another important difference lies in the apex of the elytra, which, instead of having a short oblique truncature near the suture, is transversely sinuate-truncate, with each angle produced into a longish tooth or spine, the sutural one shorter and finer than the external. The thoracic vittæ are continued to the head, forming a short streak or spot behind each eye, which, however, is not very distinct and is sometimes absent. The mesosternum is not at all prominent, but simply arched or nearly plane.

11. **Adetus pictus.**

A. denticaudæ proxime affinis, differt corpore multo latiore et breviore, vittaque lata alba utrinque ab oculo usque fere ad medium elytrorum extensa, macula autem postmediana majore ovata haud transversa alba. Castaneo-fuscus, punctatus; elytris punctis paucioribus et subtilioribus, apice utrinque sinuato-truncatis et bidentatis; corpore subtus utrinque linea alba a fronte usque ad coxas posticas extensa, mesosterno elevato, antice verticali; antennis robustis.

Long. 4 lin.

Hab. British Honduras, Belize (*Blancaneaux*).

Certainly distinct from *A. denticauda*, by its shorter and broader form and the broad stripe of compacter and whiter tomentum which extends from the hind margin of the eye down the side of the thorax and the elytron nearly to the centre of the last-named. A further difference is the stripe of similar tomentum beneath on the sides of head, prothorax, and breast. An important structural difference is seen in the prominent mesosternum, of which the front face is vertical.

12. **Adetus excultus.**

Major, atro-fuscus, subæneus, vitta laterali utrinque ab oculo usque ad medium elytrorum, macula magna discoidali ovata longe pone medium, lituraque angusta transversa prope apicem, fulvis; capite thoraceque punctatis; elytris punctulis lineatim ordinatis, interstitiis nonnullis elevatis, apice utrinque sinuato-truncatis bidentatis; corpore subtus linea fulva a fronte usque ad coxas posticas extensa, guttisque ventralibus lateralibus fulvis; mesosterno elevato, antice verticali; pedibus rufo-castaneis.

Long. $5\frac{1}{2}$ lin.

Hab. Nicaragua, Chontales (*Belt*).

Relatively as broad as *A. pictus*, but much longer; and the tomentose stripes and spots are tawny-ochreous instead of white, although of the same dimensions and in the same positions. Both species differ from *A. denticauda* in the postmedian spot of the elytra being large and ovate (lengthwise) instead of narrow and transverse, and also in the prominent and anteriorly vertical mesosternum.

PTERICHTHYA.

Pterichthya, Thomson, Physis, ii. p. 156; Lacordaire, Gen. Col. ix. p. 594.

A genus scarcely distinguishable from *Adetus*, the differences being comparative only,

and consisting chiefly in the great elongation of the outer apical angles of the elytra and the consequent gradual slope of the elytral surface near the apex. The mesosternum is nearly plane, and the prosternum very gradually and slightly arched between the anterior coxæ. I fail to see the character, mentioned by Lacordaire, of completely divided eyes, the two lobes of these organs being connected by a narrow thread as in the majority of the species of *Adetus*. The genus is peculiar to Mexico and Central America.

1. **Pterichthya pisciformis.**

Pterichthya pisciformis, Thomson, loc. cit. p. 157 [1].

Hab. Mexico [1], Puebla (*Sallé*); Guatemala (*Sallé*).

A Guatemala specimen in M. Sallé's collection has the apical prolongation of the elytra still longer than it is in Mexican examples.

2. **Pterichthya longicauda.**

Pt. pisciformi major, elytris apice maxime elongatis acutis, angulo suturali velut denticulo intus longe ante apicem sito. Supra fusco-ænea, nitida, vitta laterali fulva utrinque a vertice usque ad elytri medium (ibique curvata), linea obliqua post medium et elytrorum lateribus suffuse fulvis; antennis brevissimis, articulis 3° et 4° fulvis, hoc apice et 5°–11^{m} nigris; capite thoraceque sparsissime haud profunde punctulatis; corpore subtus fulvo, medio nigro nitido, vitta laterali ab oculi margine inferiore usque ad coxas posticas densius fulvo-tomentosa.

Long. $5\frac{1}{2}$ lin.

Hab. Mexico, Toxpam, Cordova (*Sallé*).

The peculiar fish-like form and elongation of the apices of the elytra, which distinguish this genus, is carried to a greater extreme in this than in the preceding species. It is distinguished also by its extremely fine and scattered punctuation and shining brassy ground-colour.

3. **Pterichthya furculicauda.** (Tab. VIII. fig. 6.)

Angusta, ochraceo-fusca, thorace vittis tribus, elytris utrinque vittulis obliquis tribus (una laterali minus distincta ante medium, secunda curvata pone medium tertiaque prope apicem) ochraceo-albis; capite thoraceque minus crebre grosse punctatis; elytris punctis oblongis seriatim ordinatis, his apice extus in dentem prolongatis, angulo suturali spina arcuata, declivitate posteriore grossissime punctata.

Long. 3–$3\frac{1}{4}$ lin.

Hab. Guatemala, Dueñas, Capetillo (*Champion*), Aceytuno, 5100 feet (*Salvin*).

The exterior angle of the apex of the elytra is much less elongated than in *P. pisciformis*; but the sutural angle is armed with a sharp spine just as in that species. *P. furculicauda* bears a close general resemblance to *Adetus leucostigma*, and, in short, bridges over the difference between the two genera. The postmedian and subapical stripes sometimes meet, as represented in our figure, in which it must be remarked the artist has not successfully represented the general colour of the insect.

PTERICOPTUS.

Ptericoptus, Serville, Ann. Soc. Ent. Fr. 1835, p. 61.

This genus is one of the members of Lacordaire's group Ptéricoptides, a highly artificial assemblage of genera which cannot conveniently be maintained. It is a rather aberrant form of Apomecynini, but is better placed in this group than in the following, from which it differs by its broad forehead, small, deeply-divided eyes, and short thick antennæ. It is peculiar to America; and the species, seven of which are now known, have a great general resemblance to each other.

1. **Ptericoptus caudalis.**

Postice rectilineatim angustatus; elytris apice late truncatis, angulis exterioribus elevatis et prolongatis. Carneo-fulvus, vittis duabus approximatis a vertice usque ad mediam suturam elytrorum extensis nigris; elytris dimidio apicali et vitta submarginali necnon guttis lineolisque discoidalibus atrofuscis, macula curvata transversa alteraque apicali carneo-fulvis; capite thoraceque lateribus late nigro-vittatis; antennis apicem versus nigris, articulo 8° (apice excepto) carneo-griseo.

Long. 6 lin. ♂.

Hab. GUATEMALA, Zapote (*Champion*).

Apparently much resembling *P. cruentatus*, Thoms., from Cayenne, from the description of which it differs in the distribution of the markings. The gradually narrowed elytra and the much produced exterior angles of the truncature, in the ♂, distinguish it from all other known species.

There is in M. Sallé's collection from Mexico a ♀ example which may probably be referred to this. It is larger ($8\frac{1}{4}$ lines) and more uniformly pinkish brown on the elytra. The most notable feature, however, is the simple oblique truncature of the elytra.

2. **Ptericoptus griseolus.**

Olivaceo-griseus, vittis duabus a vertice usque ad mediam suturam elytrorum extensis olivaceo-fuscis; thorace lateribus singulatim vittis duabus elytrisque passim vittis maculariibus olivaceo-fuscis, his apice late fere recte truncatis; antennis griseis, articulis a tertio apice olivaceo-fuscis.

Long. 6 lin.

Hab. GUATEMALA, Capetillo (*Champion*).

3. **Ptericoptus panamensis.**

Olivaceo-griseus, verticis macula vittisque thoracis duabus fere conjunctis fuscis; elytris vitta suturali fusca indistincta, fascia lata ante apicem nigra, disco immaculatis, apice sinuato-truncatis, angulis exterioribus paullo productis; antennis brevibus, apicem versus valde angustatis, scapo abbreviato, articulisque 3°–7^{m} crassis; pedibus brevissimis, tibiis (præcipue posticis) brevibus mox a basi usque ad apicem dilatatis.

Long. $4\frac{1}{4}$ lin. ♂.

Hab. PANAMA, Matachin (*Schunke*).

Group **ATAXIINI.**

Lacordaire's "groupe" Ataxiides includes a small number of genera having "divergent" (*i. e.* subparallel) tarsal claws, like the Apomecynini, but differing from them and other groups in the much larger and more prominent eyes and narrower and shorter forehead. The antennæ are more or less elongate, with long and distinctly separated joints, and the thorax is in general furnished with lateral tubercles. I propose to include in it the "groupe" Ptéropliides of the 'Genera,' and the genera *Epectasis*, *Amphicnæia*, and *Aletretia*, which have been hitherto placed in widely different groups.

As far as at present known, the Ataxiini are confined to the American continent, some of the genera being peculiar to Brazil.

PARYSATIS.

Parysatis, Thomson, Physis, ii. p. 118; Lacordaire, Gen. Col. ix. p. 599.
Esthlogena (partim), Bates, Ann. & Mag. Nat. Hist. ser. 3, xvii. p. 290.

Lacordaire omits the chief character which distinguishes this from the closely-allied genus *Esthlogena*—namely, the acute exterior apical angle and the narrow cicatrice of the antennal scape, a structural feature which did not escape Thomson. The genus is distributed throughout Tropical America from South Brazil to Mexico. Of the *Esthlogenæ* described by me from the Amazons and South Brazil the following belong to it—*E. sulcata*, *mucronata*, *linearis*, and *obtusa*.

1. **Parysatis rufitarsis.**

Valde elongata, castaneo-fusca, dense erecte pilosa pilisque decumbentibus griseis maculatim vestita; antennarum articulis basi griseis; tarsis fulvo-rufis; capite thoraceque grosse discrete punctatis, hoc linea irregulari dorsali brevi; elytris punctulato-striatis, apice utrinque flexuoso-truncato, angulo suturali rotundato, exteriori dentiformi, acuto; tibiis ut in *P. sulcata* haud dilatatis; mesosterno antice late concavo lævi.
Long. 6 lin.

Hab. NICARAGUA, Chontales (*Belt*).

Similar to *P. sulcata* and *P. mucronata*; differing from the former by its narrower form and different colours, and from the latter, with which it agrees in general form, by the undilated tibiæ.

2. **Parysatis flavescens.**

P. nigritarsis (Thoms.) proxime affinis. Modice elongata, breviter erecte pilosa tomentoque flavescente vestita; pedibus rufescentibus, geniculis tarsisque nigris; thorace grosse discrete punctato, spatio dorsali lævi; elytris conspicue punctato-striatis, apice obtusissime truncatis; corpore subtus subtiliter griseo-tomentoso; mesosterno fere plano, declivi, tuberculo minuto armato; antennis griseo-rufescentibus, articulis apice fuscis, scapo valde elongato.
Long. 6 lin.

Hab. MEXICO, Paso del Macho (*Höge*); COSTA RICA, Cache (*Rogers*).

3. **Parysatis canescens.**

Valde elongata, robusta, ochraceo-fusco subtiliter tomentosa, passim erecte fusco-pilosa setisque albis (in elytris lineatim digestis) inspersis; capite sparsim punctato; thorace crebre grosse punctato, linea discoidali lævi; elytris modice angustatis apice oblique truncatis, supra punctato-striatis; corpore subtus pedibusque nigris griseo (haud dense) passim pubescentibus, tarsis fulvis.

Long. $8\frac{1}{2}$ lin.

Hab. MEXICO, S.W. Yucatan.

Received from Dr. Horn of Philadelphia. A very distinct species, having a superficial resemblance to *Esthlogena porosa*.

ESTHLOGENA.

Esthlogena, Thomson, Syst. Ceramb. p. 107.

Similar in range to *Parysatis*. Half a dozen species only have been described. Many of those entered under the genus in the Munich Catalogue are erroneously so placed, having been described as species of *Estola*, a genus belonging to a different group.

1. **Esthlogena porosa.** (Tab. VIII. fig. 7.)

Esthlogena porosa, Bates, Trans. Ent. Soc. 1872, p. 200[1].

Hab. NICARAGUA, Chontales (*Belt*[1]).

2. **Esthlogena albisetosa.**

Elongata, angusta, subtiliter fusco tomentosa, setis albis passim variegata; antennarum articulis basi albis; pedibus rufescentibus, tarsis fulvis; thorace supra inæquali, punctis haud profundis grossissimis; elytris lineatim sparsim punctulatis, apice obtuse truncatis.

Long. $5\frac{1}{2}$ lin.

Hab. MEXICO (*Boucard*); BRITISH HONDURAS, Belize (*Blancaneaux*).

EPECTASIS.

Epectasis, Bates, Ann. & Mag. Nat. Hist. ser. 3, xvii. p. 294.

The true position of this curious genus is in the present group, notwithstanding its extremely narrow linear form and the unarmed sides of the thorax. The antennal scape has a similar narrow cicatrice to that of *Parysatis*. The middle cotyloid cavities, however, are perfectly closed; but this is a character which, as Dr. Leconte has shown, does not possess the importance that Lacordaire attributed to it. The following is the only known species:—

1. **Epectasis attenuata.** (Tab. VIII. fig. 16.)

Epectasis attenuata, Bates, loc. cit.

Hab. GUATEMALA, near the city (*Salvin*); NICARAGUA, Chontales (*Belt*).—SOUTH AMERICA, Amazons to South Brazil.

AMPHICNÆIA.

Amphicnæia, Bates, Ann. & Mag. Nat. Hist. ser. 3, xvii. p. 32 (1866).
Æsylacris, Thomson, Physis, ii. p. 143 (1868) ?

I had originally placed this genus in the group Onciderini, near *Dorcasta*, on the ground of its elongated and robust claw-joints. But the form of the antennal scape, shortness of the muzzle, and the large convex eyes are characters foreign to that group, and betray an affinity to the Ataxiini. The shape of the thorax and facies of the insect, however, are very different from the Ataxiini; and I place the genus here only provisionally. The notch on the outside edge of the middle tibiæ is not distinct as in *Dorcasta*. The genus is peculiar to Tropical America, some half a dozen species being known.

1. **Amphicnæia brevivittis.** (Tab. IX. fig. 17.)

Amphicnæia brevivittis, Bates, Trans. Ent. Soc. 1872, p. 202 [1].

Hab. NICARAGUA, Chontales (*Belt*) [1].

2. **Amphicnæia crustulata.** (Tab. IX. fig. 16.)

Amphicnæia crustulata, Bates, loc. cit. p. 235 [1].

Hab. NICARAGUA, Chontales (*Belt* [1]).

ASYNGENES.

Corpus parvum, cylindricum, nitidum, longe pilosum. Caput inter antennas depressum, antice brevissimum, fronte convexiuscula; oculi magni, grossissime granulati. Antennæ corpore longiores, robustæ, longe (præcipue infra) pilosæ; scapo brevi, mox a basi intus dilatato; articulo tertio dimidio breviore quam quartus, cæteris a quinto longitudine tertio subæqualibus. Thorax cylindricus, supra convexus, utrinque spina brevi acuta armatus. Elytra cylindrica, apice rotundata, parum punctata. Prosternum antice breve, inter pedes arcuatum, apice dilatatum. Mesosternum arcuatum; acetabula extus fere clausa. Pedes breves, robusti; femora gradatim clavata; tibiæ intermediæ extus conspicue sinuatæ; tarsi articulis 1^{o}–3^{m} brevissimis, conjunctim haud longioribus quam quartus, hoc gradatim modice incrassato, unguiculis semi-divaricatis.

The position of this genus of minute Lamiadæ is extremely difficult to allot on the system of Lacordaire. The undecided form of the tarsal claws, which is midway between his "crochets divergents" and "crochets divariqués," is the first perplexing feature; and the difficulty is not easily overcome by taking the signs of affinity presented by the other structural characters. By its general form and clothing the genus would seem to find its natural place near *Eupogonius*, from which, however, the notched middle tibiæ and shortened third antennal joint effectually remove it. In these points it most resembles the genus *Amphicnæia*; and it is next to this that I propose to leave it. The antennæ are almost exactly similar; but the spined thorax and less parallel tarsal claws sufficiently distinguish it. One species only is known, remarkable for its shining brassy colour.

1. **Asyngenes chalceolus.**

Parvus, fusco-castaneus, æneo-micans, pilis longis vestitus; thorace crebre sed discrete punctato, spatio dorsali lævi; elytris subtilissime griseo-pubescentibus et parce irregulariter sed sublineatim punctatis, hic illic rugosulis, stria suturali distincte impressa.

Long. $1\frac{1}{2}$–2 lin.

Hab. GUATEMALA, San Gerónimo (*Champion*).

Group **DESMIPHORINI.**

The insects composing this group are of elongate cylindrical form, with lateral thoracic tubercles, widely divergent claws (at right angles to the axis of the tarsi), and short forehead with well-developed eyes. Including in the group Lacordaire's Apodasyides, which agree in these characters, we have an assemblage of genera for the most part remarkable for the long pubescence with which they are clothed, sometimes in the form of eccentric tufts. In some genera the antennæ only are densely hairy.

DESMIPHORA.

Desmiphora, Serville, Ann. Soc. Ent. Fr. 1835, p. 62.

Sixteen species of this curious genus have been described, all from Tropical America.

1. **Desmiphora fasciculata.** (Tab. VIII. fig. 8.)

Cerambyx fasciculatus, Olivier, Entom. no. 67, p. 96, t. 17. f. 131.
Lamia fasciculata, Fabricius, Ent. Syst. i. 2, p. 284.
Desmiphora fasciculata, Serville, loc. cit. p. 63; Bates, Trans. Ent. Soc. 1873, p. 225 [1].
Desmiphora gigantea, Thomson, Class. Long. p. 75 [2].

Hab. MEXICO, Cordova (*Höge*); NICARAGUA, Chontales [1].—SOUTH AMERICA to South Brazil.

The species varies in size wherever it occurs. *D. servillei* (White), a local form from Espirito Santo, has dark-coloured base of antennæ and tarsi.

2. **Desmiphora cirrosa.** (Tab. VIII. fig. 9.)

Desmiphora cirrosa, Erichson, Wiegm. Arch. 1847, i. p. 147; Bates, Trans. Ent. Soc. 1872, p. 201 [1].

Hab. MEXICO, Cordova (*Sallé*); NICARAGUA, Chontales (*Belt* [1]).—SOUTH AMERICA, Peru, Amazons.

In South Brazil this species is represented by the closely allied *D. cucullata* (Thoms.), both being distinguished by the front and sides of the thorax and the occiput being clothed with dense whitish tomentum.

3. **Desmiphora mexicana.**

Desmiphora mexicana, Thoms. Class. Long. p. 75 [1]; Bates, Trans. Ent. Soc. 1872, p. 200 [2].

Hab. MEXICO [1], Playa Vicente (*Sallé*); GUATEMALA, near the city (*Salvin*), Zapote (*Champion*); NICARAGUA, Chontales (*Belt* [2], *Janson*); PANAMA, Chiriqui (*Ribbé*).—SOUTH AMERICA, Venezuela (*D. lanata*, Chevrolat?).

4. **Desmiphora canescens.** (Tab. VIII. fig. 10.)

Desmiphora canescens, Bates, Trans. Ent. Soc. 1873, p. 226 [1].

Hab. NICARAGUA, Chontales (*Belt* [1]).

5. **Desmiphora ægrota.**

D. canescenti affinis. Parva, pallide fulva, antennis pedibusque fulvo-albis; elytris ante apicem lineis transversis flexuosis penicillatis albis, maculis rufescentibus interjectis; capite, thoracis dorso maculaque scutellari fuscescentibus; corpore longe erecte piloso, thorace scutelloque basi penicillis tenuibus fuscis.

Long. $2\frac{3}{4}$ lin.

Hab. GUATEMALA, Capetillo (*Champion*).

Like *D. canescens*, this remarkable pale-coloured little species is distinguished by the absence of erect tufts of hair from the basal elevations of the elytra.

PYRRACITA.

Pyrracita, Thomson, Physis, ii. p. 105.

A genus closely allied to *Desmiphora*, and of similar geographical range. Three species have been described.

1. **Pyrracita infima.**

Pyrracita infima, Thomson, loc. cit. p. 107.

Hab. MEXICO.

ATELODESMIS.

Atelodesmis, Buquet, Arch. Ent. i. p. 334; Lacordaire, Gen. Col. ix. p. 625.

Like the two preceding, this genus is confined to Tropical America. Three species have been admitted by Thomson and Lacordaire as belonging to it, namely two from Brazil and one from Mexico.

1. **Atelodesmis unicolor.**

Atelodesmis unicolor, Buquet, loc. cit. p. 336.

Hab. MEXICO, Cordova (*Sallé*).

EUPOGONIUS.

Eupogonius, Leconte, Journ. Acad. Sci. Phil. ser. 2, ii. p. 159 (1852).
Eriopsilus, Bates, Ann. & Mag. Nat. Hist. ser. 3, xvii. p. 193 (1866).

I have referred to this genus a number of small, subcylindrical, pubescent species allied to *Desmiphora* and *Therchætes*. The only one of Leconte's species with which I have been able to compare them is *E. subarmatus*; and with this they are certainly congeneric, but they are generally more coarsely pubescent. All have short muzzles, large coarsely-granulated eyes, and antennæ in which the scape is short, thick, and abruptly narrowed on one side at the base, with third and fourth joints elongated, and the fifth to eleventh much shortened. The middle cotyloid cavities are not quite closed. In most the middle tibiæ show scarcely any trace of the groove on their outer edge; in others it is visible. There is a difference among the species, also, in the degree of depression of the crown between the antenniferous tubercles: in some this depression is scarcely perceptible; and such species, except for their long pubescence and cylindrical forms, might almost be referred to *Estola*. Nine species have been already described, from the United States, Central, and the northern parts of South America. My genus *Eriopsilus* is not to be distinguished from *Eupogonius* as here defined.

1. **Eupogonius subæneus.** (Tab. VIII. fig. 14.)

Eupogonius subæneus, Bates, Trans. Ent. Soc. 1872, p. 234[1].

Hab. Guatemala, Senahu, Vera Paz (*Champion*); Nicaragua, Chontales (*Belt*[1]); Costa Rica.

2. **Eupogonius flavocinctus.** (Tab. VIII. fig. 15.)

Eupogonius flavocinctus, Bates, loc. cit. p. 235[1].

Hab. Nicaragua, Chontales (*Belt*[1]).

3. **Eupogonius longipilis.**

Subcylindricus, castaneo-niger, pilis longissimis passim vestitus; capite et thorace multo angustioribus quam elytra, illo antice brevi sed quadrangulari, hoc parvo vittis minus distinctis tribus fulvis; antennis scapo graciliore, articulo tertio gracili valde elongato, quarto paullo breviore; elytris nitidis, punctatis, apice rotundatis, supra plagiatim fulvo tomentosis; pedibus castaneis, tibiis pallidioribus, intermediis extus integris.

Long. $2\frac{3}{4}$ lin.

The antennæ are more slender than in *E. subarmatus* and *E. subæneus*, but present similar proportions as to length of the separate joints, the scape only being rather longer and more slender. The thorax is cylindrical, but relatively shorter and narrower than in the other species; its lateral tubercle is small, as in the rest of the genus, but more sharply pointed.

4. **Eupogonius ursulus.** (Tab. VIII. fig. 13.)

Eupogonius ursulus, Bates, loc. cit. p. 235 [1].

Hab. NICARAGUA, Chontales (*Belt* [1]).

Group **POGONOCHERINI.**

ESTOLA.

Estola, Fairmaire et Germain, Ann. Soc. Ent. Fr. 1859, p. 524; Lacordaire, Gen. Col. ix. p. 643.

Seventeen species of this exclusively American genus have been described. The range includes temperate regions from Chili in the South to the United States in the North, *Pogonocherus* (?) *sordidus* (Leconte), from Lower California, being an *Estola* very closely allied to *E. perforata*.

1. **Estola perforata.**

Estola perforata, Bates, Trans. Ent. Soc. 1872, p. 200 [1].

Hab. GUATEMALA, Capetillo, San Juan and Tamahu, Vera Paz (*Champion*); BRITISH HONDURAS, Belize (*Blancaneaux*); NICARAGUA, Chontales (*Belt* [1], *Janson*); COSTA RICA, Caché (*Rogers*).

In this species the elytra are more elongate and less trigonal than in the majority of the genus. It differs also in the absence of broad pallid rings from the antennæ (chiefly the eighth joint), the joints being only narrowly ringed with grey at the base, and, further, in the plane mesosternum.

2. **Estola ignobilis.** (Tab. VIII. fig. 11.)

Estola ignobilis, Bates, loc. cit. [1]

Hab. MEXICO, Toxpam (*Sallé*); GUATEMALA, Dueñas, Capetillo, San Gerónimo (*Champion*); BRITISH HONDURAS, Belize (*Blancaneaux*); NICARAGUA, Chontales (*Belt* [1], *Janson*).

3. **Estola vittulata.** (Tab. VIII. fig. 12.)

Estola vittulata, Bates, Trans. Ent. Soc. 1873, p. 226 [1].

Hab. GUATEMALA, Tocoy, Vera Paz (*Champion*); BRITISH HONDURAS, Belize (*Blancaneaux*); NICARAGUA, Chontales (*Belt* [1]).

TÆLOSILLA.

Tælosilla, Thomson, Physis, ii. p. 112; Lacordaire, Gen. ix. p. 644.

One species, which I have not seen, from Mexico, constitutes this genus.

1. **Tælosilla lateralis.**

Tælosilla lateralis, Thomson, loc. cit.

Hab. MEXICO.

PARESTOLA.

Genus *Estolæ* affine, at differt pedibus longioribus femoribusque longius pedunculatis, necnon thorace spina acuta laterali armato. Corpus oblongo-ovatum, subtiliter tomentosum. Caput angustum, inter antennas depressum; tubera antennifera elevata. Antennæ graciles, albimaculatæ, subtus ciliatæ, scapo paullo elongato, intus mox a basi dilatato; articulo tertio maxime elongato, quarto paullo breviore, cæteris modice abbreviatis æqualibus. Oculi magni, grosse granulati. Thorax elytris multo angustior, lateribus acute spinosis. Elytra oblongo-ovata, modice convexa, crebre sublineatim punctata, apice rotundata. Pedes elongati, graciles; femora clavata, apice longe pedunculata; tibiæ intermediæ extus leviter sinuatæ. Prosternum inter pedes arcuatum, apice dilatatum. Mesosternum arcuatum; acetabula extus perparum aperta.

The insect for which this genus is constituted differs from *Estola* by its oblong-ovate elytra, relatively much narrower head and thorax, and its longer legs with longer and more slender peduncle to the clavate femora. It also differs by the lateral armature of the thorax consisting of a short sharp spine instead of a conical tubercle. The sculpture and clothing are very similar.

1. **Parestola zapotensis.**

Oblongo-ovata, atrofusca, nigro breviter setosa, elytris pallide fusco marmoratis; antennis articulis 4°, 6°, 8° albo-testaceo late annulatis; capite thoraceque crebre punctatis, elytris crebre sublineatim punctatis.

Long. $2\frac{3}{4}$–$3\frac{1}{4}$ lin.

Hab. GUATEMALA, Zapote (*Champion*).

ATIMIOLA.

Corpus parvum, oblongo-ovatum, tomentosum. Caput inter antennas depressum, antice infra oculos breve, paullo angustatum. Antennæ corpore breviores, pallide annulatæ, scapo brevi, intus mox a basi dilatato, articulo tertio fere dimidio breviore quam quartus. Thorax quadratus, elytris angustior, dorso quinquetuberoso, lateribus paullo post medium spina acuta armatis. Elytra oblongo-ovata, modice convexa, apice rotundata, supra setosa, crebre punctata. Prosternum ante pedes liberum, inter pedes arcuatum, apice dilatatum. Mesosternum nullo modo elevatum, concavum; acetabula intermedia paullo aperta. Pedes breves; tibiæ intermediæ extus distincte sinuatæ.

In the majority of its structural characters this genus closely resembles *Estola*; but the oblong-ovate elytra, acutely spined thorax, and especially the shortness of the third antennal joint as compared with the fourth, necessitate its separation. The thorax is gradually narrowed anteriorly from the tips of the lateral spines, and sinuated behind the spines—a structure quite foreign to *Estola* and *Pogonocherus*, and indicating an affinity towards *Exocentrus*.

1. **Atimiola guttulata.**

Olivaceo-fusca, elytris albiguttulatis, scutello fulvo-tomentoso, antennis articulis basi rufescentibus vel cinereis; corpore supra subcrebre irregulariter punctato, elytris apice singulatim rotundatis.
Long. 2–3¼ lin.

Hab. GUATEMALA, Dueñas, San Gerónimo (*Champion*).

POLIÆNUS.

Genus *Pogonochero* proxime affine, differt antennarum scapo longiore et graciliore. Corpus oblongum, pilis longissimis passim vestitum. Antennæ corpore multo longiores; scapo subelongato gradatim modice incrassato; articulis 3° et 4° gracilibus, illo paullo longiore. Thorax tuberculo laterali crasso, conico, alteris duobus similibus dorsalibus. Elytra postice valde convexa, medio dorso depressiuscula, lineatim penicillata, lateraliter singulatim bicarinata. Mesosternum antice depressum, concavum. Acetabula antica extus anguste angulata; intermedia extus ut in *Pogonochero* fere clausa. Pedes ut in *Pogonochero*, tibiis intermediis prope apicem extus sinuatis et ciliatis.

A genus interesting from its close affinity with the North-Temperate *Pogonocherus*, from which its more oblong form, hirsute clothing, and longer antennæ at first sight distinguish it. The only positive structural characters which it presents are the slender form of the scape and the third and fourth joints of the antennæ. The form of the scape is decisive of generic distinctness.

1. **Poliænus hirsutus.**

Griseo-fuscus, undique griseo-hirsutus, antennis (scapo fusco excepto) pedibusque pallide rufescentibus, thorace et elytris dorso fulvescentibus; his apice breviter obtuso truncatis, lateraliter ab humeris singulatim bicarinatis et inter carinas grosse lineatim punctatis.
Long. 3 lin.

Hab. GUATEMALA, Dueñas, Capetillo, San Gerónimo (*Champion*).

The body, antennæ, and legs are clothed with long, grey, woolly hairs, which on the dorsal surface of the elytra are replaced by more scanty, long, blackish bristles. The elyrat are convex, with steeply declivous sides and apex and depressed disk; from each shoulder proceed two sharp raised lines, neither of which reaches the apex, the space between them being deeply punctured. Small pencils of stiff hairs surmount the slightly elevated centro-basal crests, and form a line down the posterior part of the disk of each elytron. The colour of the elytra may be described as tawny reddish, with greyish black sides, the black colour spreading towards the middle posteriorly.

Group **COMPSOSOMINI.**

Including the Ærénéides of Lacordaire, the Compsosomini form a small and very distinct group, containing seven genera and about thirty species, and peculiar to the tropical and south temperate parts of America. Only one genus has yet been recorded from north of Panama.

ÆRENEA.

Ærenea, Thomson, Archiv. Entom. i. p. 298.

1. **Ærenea impetiginosa.** (Tab. VIII. fig. 22.)

Ærenea impetiginosa, Thomson, Physis, ii. p. 95 ; Bates, Trans. Ent. Soc. 1872, p. 201 [1].

Hab. NICARAGUA, Chontales (*Belt* [1]).—SOUTH AMERICA, Venezuela.

Group **ONCIDERINI.**

A characteristic American group, very numerous in species and genera within the tropics, and sparsely represented in the temperate zones. In a natural arrangement it would be brought into contiguity with the Apomecynini and Niphonini, from which Lacordaire widely separates it. His "groupe" Onocéphalides may, with advantage, be combined with the Onciderini.

JAMESIA.

Jamesia, Jekel, Journ. of Ent. i. p. 259 (1861).

Four species of this genus are known, from South and Central America.

1. **Jamesia papulenta.** (Tab. VIII. fig. 17.)

Jamesia papulenta, Thomson, Physis, ii. p. 43 [1]; Bates, Trans. Ent. Soc. 1872, p. 201 [2].

Hab. NICARAGUA, Chontales (*Belt* [2]).—SOUTH AMERICA, Colombia [1].

2. **Jamesia multivittata.** (Tab. VIII. fig. 18.)

Jamesia multivittata, Bates, loc. cit. 1869, p. 388 [1].

Hab. NICARAGUA, Chontales (*Belt* [1], *Janson*).

TYBALMIA.

Tybalmia, Thomson, Physis, ii. p. 44.

Five species have been described of this genus, which has a similar range to the preceding. All those species of *Ischiocentra* which have porrected frontal horns in the male, however, must be added, for the reasons given below in the remarks on *T. turbida*: these include *I. jaspidea*, *niphonoides*, *maculosa*, *heraldica*, and others.

1. **Tybalmia cæca.** (Tab. VIII. fig. 19.)

Tybalmia cæca, Bates, Trans. Ent. Soc. 1872, p. 201 [1].

Hab. NICARAGUA, Chontales (*Belt* [1], *Janson*).

2. **Tybalmia funeraria.**

T. cæcæ quoad formam simillima. Magna, subdepressa, supra fusco-ochraceo subtiliter tomentosa, atomis atrofuscis inspersa; elytris post medium utrinque macula magna obliqua subovata postice laciniata atrofusca, antice plaga cinereo-ochracea marginata; capite antice ut in *T. cæca* elongato planato, cornibus frontalibus (♂) longe porrectis, vertice atrofusco vittulatis; thorace transversim triplicato, atrofusco maculato, tuberculo laterali valido, conico; elytris humeris extantibus paullulum subfalcatis (apice tuberculatis), deinde usque ad apicem gradatim angustatis, prope basin utrinque paullo et obtuse elevatis, tota basi subtiliter punctulato-asperatis.

Long. 13 lin. ♂.

Hab. MEXICO, Toxpam (*Sallé*).

There is one example of this fine species in M. Sallé's collection.

3. **Tybalmia turbida.** (*Ischiocentra maculosa*, Tab. VIII. fig. 20.)

Fusca, tomento ochraceo-fulva maculatim dense vestita; antennis ♂ elongatissimis, (scapo excepto) castaneo-rufis; fronte elevata quadrata (supra nullomodo angustata); oculis modice elongatis, fascia suboculari lineolisque occipitis fuscis; cornibus frontalibus elongatis distantibus; thorace valde transverso, inæquali, tuberibus utrinque lateralibus duobus obtusis; elytris postice parum angustatis, parum convexis, humeris prominulis, basi tantum sparse punctatis.

Long. 10 lin. ♂.

Hab. NICARAGUA, Chontales (*Janson*).

This species is distinguished from *T.* (*Ischiocentra*) *maculosa* (Bates), from the Amazons, by the lateral prominence of the thorax not forming a distinct conical tubercle; in colours and markings there is a remarkable similarity between the two species.

The shape of the large vertical forehead in *Tybalmia* and allied genera is subject to abrupt modifications from species to species. In the typical species (*T. pupillata*) it is trapezoidal, the crown being narrowed and the frontal horns thereby brought more close y together—a structure affecting the form of the thorax, which is narrowed anteriorly almost as in *Jamesia*. In *T. cæca* the forehead is rectangular; but in other respects there is so close an affinity that it is impossible to separate the two species. Such being the case, it is necessary to transfer to *Tybalmia* those species described as *Ischiocentræ* which have a similar form of forehead and of frontal horns, these features evidently presenting more reliable characters than the form of the forehead. In *Ischiocentra clavata*, the type of the genus, the frontal horns are vertical and the thorax subcylindrical.

4. **Tybalmia heraldica.** (*Ischiocentra heraldica*, Tab. VIII. fig. 21.)

Ischiocentra heraldica, Bates, Trans. Ent. Soc. 1872, p. 201[1].

Hab. NICARAGUA, Chontales (*Belt*[1]).

HYPOMIA.

Hypomia, Thomson, Physis, ii. p. 51; Lacordaire, Gen. Col. ix. p. 671.

The following species, unknown to me, is the only one of this genus yet recorded :—

1. **Hypomia mexicana.**

Hypomia mexicana, Thomson, loc. cit. p. 52.

Hab. Mexico.

HYPSIOMA.

Hypsioma, Serville, Ann. Soc. Ent. Fr. 1835, p. 38; Lacordaire, Gen. Col. ix. p. 675; Thomson, Physis, ii. p. 45; Bates, Trans. Ent. Soc. 1872, p. 201.

Hypselomus, Erichson, Wiegm. Archiv, 1847, i. p. 148; Thomson, Class. Long. p. 115; Bates, Ann. & Mag. Nat. Hist. xvi. 1865, p. 112 (nec Perty).

Upwards of thirty species of this genus have been described, all American, ranging from Buenos Ayres to Central America. None has yet been recorded from Mexico or the West Indies. The genus is distinguished by its compact subtriangular form, with very prominent humeral angles, cylindrico-conical unarmed thorax, and strongly flexuous third antennal joint.

1. **Hypsioma picticornis.** (Tab. IX. figg. 7, 8).

Hypselomus picticornis, Bates, Ann. & Mag. Nat. Hist. 1865, xvi. p. 111 [1].

Hypsioma signaticornis, Thomson, Physis, ii. p. 48 (1868) [2].

Hypsioma picticornis, Bates, Trans. Ent. Soc. 1872, p. 201 [3].

Hab. Guatemala, San Juan, Vera Paz (*Champion*); Nicaragua, Chontales (*Belt* [3], *Janson*); Panama, Chiriqui (*Ribbé*).—South America, Amazons [1], Brazil [2].

PLERODIA.

Plerodia, Thomson, Physis, ii. p. 60; Lacordaire, Gen. Col. ix. p. 670.

Five species of this genus have been described, all from Tropical South America.

1. **Plerodia degenera.**

Pl. syringi (Bates) proxime affinis et simillima; differt corpore paullo breviore thoracisque tuberculo dorsali minus elevato. Fuligineo-fusca, elytris utrinque vitta inconspicua ab humeris versus suturam curvata cinerea; antennis articulis 4°–11^{m} basi pallidioribus; thorace cylindro-conico, tuberculo elongato discoidali vix conspicuo; elytris punctulatis, angulo humerali in carinam brevem prolongato.

Long. $4\frac{1}{2}$ lin.

Hab. Guatemala, Zapote (*Champion*).

Scarcely distinct from the South-Brazilian *Plerodia syrinx*; it is, however, decidedly shorter in the body, and the frontal horns in the single male specimen are much shorter.

TRACHYSOMUS.

Trachysomus, Serville, Ann. Soc. Ent. Fr. 1835, p. 40.

Seven species of this distinct and remarkable genus have been recorded from Tropical South America. It has not hitherto been known as represented in the part of the tropical zone north of Colombia.

1. **Trachysomus fragifer.**

Lamia fragifera, Kirby, Trans. Linn. Soc. xii. p. 440.

Hab. Mexico, Juquila (*Sallé*).—South America, Cayenne to South Brazil.

A specimen in M. Sallé's collection does not differ from examples from South Brazil. The species is widely distributed; but in the Amazons region it occurs in a slightly modified form.

ONCIDERES *.

Oncideres, Serville, Ann. Soc. Ent. Fr. 1835, p. 67; Lacordaire, Gen. Col. ix. p. 677.

Nearly fifty species of this fine genus of American Lamiadæ have been described, the great majority of which are confined to the tropical zone, a few only, of diminished size, occurring in temperate latitudes, in the regions of the La Plata in the south, and in the Atlantic States in the north. One species, *O. amputator*, Fab. (=*lherminieri*, Forsstr.) is found in the West Indies.

Lacordaire dwells, with good reason, on the heterogeneity of the contents of the genus as at present defined. Some of the divergent points of structure seem to me only of specific rank; but others are more important, and point to the existence of two natural groups. In one group, of which *O. callidryas* may be taken as the type, the general form is much less cylindrical and less convex, the thorax in both sexes as wide or wider behind than in front, and the frontal horns of the male porrect. This group is very closely allied to *Tybalmia.* In the second, or typical, group, the form is cylindrical and convex, and the thorax (especially in the female) narrower behind than in front. The first section is almost of generic rank, and may be distinguished by the name of *Lochmæocles.*

Section i. Lochmæocles.

1. **Oncideres callidryas.** (Var. ♀, Tab. IX. fig. 9.)

Oncideres callidryas, Bates, Ann. & Mag. Nat. Hist. 1865, xvi. p. 175.

Var.

Elytrorum maculis fulvo-ochraceis, minus discretis, plus minusve difformibus et confluentibus.

Hab. Var., Nicaragua, Chontales (*Belt, Janson*).—Typ., South America, Amazons.

* The founder of this genus, and inventor of the name, made it feminine.

2. **Oncideres sparsa.** (*O. callidryas*, ♂ var., Tab. IX. fig. 10.)

Minus elongata, castaneo-fusca, subtus cano-tomentosa, capite thoraceque griseis; elytris maculis difformibus hic illic confluentibus canescenti-fulvis sparsissime punctatis, punctis basin versus asperato-tuberculatis, apicem versus obsoletis; antennis (scapo fusco excepto) rufo-castaneis.

Long. $7\frac{1}{2}$ lin.

Hab. Mexico, Toxpam (*Sallé*); Nicaragua, Chontales (*Belt*).

The irregular and widely-scattered punctures of the elytra effectively distinguish this species from *O. callidryas*. Towards the base some of the punctures are accompanied each by a small tubercle; and near the apex they become smaller and shallower. The spots of hoary tomentum are more or less tinted with fulvous, and are all of irregular form, condensing most towards the middle of the sides.

3. **Oncideres tessellata.**

Oncideres tessellata, Thomson, Physis, ii. p. 90 [1].

Hab. Costa Rica [1].—South America, Venezuela.

The punctuation of the elytra is similar to that of *O. sparsa*, but rather denser; the tawny tomentum is condensed into round spots, which clothe the elytra from near the base to the apex, leaving a large lateral patch of whiter colour.

Section ii. Oncideres.

4. **Oncideres albomarginata.** (Tab. IX. fig. 12.)

Oncideres albomarginata, Thomson, Physis, ii. p. 80 [1]; Bates, Trans. Ent. Soc. 1872, p. 202 [2].

Hab. Mexico, Cordova (*Sallé*); Nicaragua, Chontales (*Belt* [2]).—South America, Venezuela, Cayenne [1].

In Mexico the species occurs (according to an example in M. Sallé's collection) in a somewhat modified form, the colour being much paler and the white elytral border being in consequence less clearly defined.

5. **Oncideres putator.**

Oncideres putator, Thomson, Physis, ii. p. 81 [1].

Hab. Mexico [1], Orizaba (*Sallé*); Honduras, Belize (*Blancaneaux*).

6. **Oncideres fulvostillata.** (Tab. IX. fig. 11.)

Oncideres fulvostillata, Bates, Trans. Ent. Soc. 1872, p. 202 [1].

Hab. Nicaragua, Chontales (*Belt* [1]).

7. **Oncideres pœcila.**

Parva, cylindrica, grisea, fulvo-aurantiaco varia, elytris macula utrinque ovata transversa mediana alba, guttis numerosis nigro-nitidis; capite latiore quam thorax, aurantiaco-fulvo; thorace juxta basin valde angus-

tato, medio fascia aurantiaca maculisque septem nigro-nitidis transversim positis, tuberculo laterali minuto; elytris prope basin tuberculis rotundatis plurimis fere aggregatis, deinde usque ad apicem punctatis, punctis singulis in macula singula nigra sitis, maculis aurantiacis rotundatis versus basin confluentibus; metasterno obscure cano, episternis aurantiacis.

Long. 5 lin. ♀.

Hab. MEXICO, S.W. Yucatan (received from Dr. Horn, Philadelphia).

Belongs to the same section as *O. impluviata*, and apparently closely allied to *O. minuta* (Thoms.) from Cayenne. The elytra are relatively short compared with the head and thorax.

8. **Oncideres scitula.**

Angustissima, elongata, minus convexa, rufo-fusca, capite thoraceque miniaceo vittatis, elytris guttis rotundatis e tomento miniaceo numerosis, in ordines utrinque quatuor dispositis; pedibus miniaceis; antennis fuscis, articulis a tertio basi griseis; corpore subtus griseo, lateraliter miniaceo maculato; tuberculis antenniferis pilosis; thorace medio utrinque minute tuberculato, postice haud angustato; elytris punctulatis.

Long. 7 lin.

Hab. MEXICO, Oaxaca (*Sallé*).

Distinguished from the allied *O. cingulata* (Say) and other similar species, by the thorax being of the same width behind as before the lateral tubercle, and by the thicker and more raised tomentum of the red spots of the elytra.

TARICANUS.

Taricanus, Thomson, Physis, ii. p. 73.

A genus peculiar, as far as at present known, to Mexico, and containing only one species:—

1. **Taricanus truquii.** (Tab. IX. fig. 6.)

Taricanus Truquii, Thomson, loc. cit. p. 74[1].

Hab. MEXICO[1], Puebla (*Sallé*).

PERIERGATES.

Periergates, Lacordaire, Gen. Col. ix. p. 679.

Peculiar, as far as at present known, to Guatemala. The following is the only recorded species.

1. **Periergates rodriguezi.**

Periergates Rodriguezi, Lacordaire, loc. cit. p. 679, nota[1].

Hab. GUATEMALA (*Rodriguez*[1]); Zapote, San Gerónimo (*Champion*).

EUDESMUS.

Eudesmus, Serville, Ann. Soc. Ent. Fr. 1835, p. 81.

Nine species have been described of this genus, remarkable for the tumid and fusiform third antennal joint in the males. The genus is peculiar to Tropical America.

1. **Eudesmus posticalis.** (Tab. IX. fig. 13.)

Eudesmus posticalis, Guérin, Icon. Règn. Anim. texte, p. 248 [1]; Bates, Ann. & Mag. Nat. Hist. ser. 3, xvi. (1865) p. 181 [2]; ib. Trans. Ent. Soc. 1872, p. 202 [3].

Hab. NICARAGUA, Chontales (*Belt* [3]); SOUTH AMERICA, Amazons [2], Brazil [1].

The single Nicaragua specimen taken by Mr. Belt differs a little in the colours of the elytra from South-American examples, the subapical brown patch being more deeply coloured and the grey being more continuous towards the base.

CYLICASTA.

Cylicasta, Thomson, Physis, ii. p. 42 (1868); Lacordaire, Gen. Col. ix. p. 682.
Trestonia (partim), Buquet, Arcan. Nat. p. 45 (1859); Bates, Ann. & Mag. Nat. Hist. ser. 3, xvi. p. 312 (1865).

Also peculiar to Tropical America. Many species exist unpublished in collections; the following is the only one hitherto described.

1. **Cylicasta terminata.**

Trestonia terminata, Buquet, Arcan. Nat. p. 47, t. 5. f. 3 (1859)[1].
Trestonia coarctata, Bates, Ann. & Mag. Nat. Hist. ser. 3, xvi. p. 812 (1865)[2]; id. Trans. Ent. Soc. 1872, p. 202[3].

Hab. NICARAGUA, Chontales (*Belt* [3]).—SOUTH AMERICA, Cayenne [1], Amazons [2].

ECTHŒA.

Ecthœa, Pascoe, Trans. Ent. Soc. ser. 3, iv. p. 250 (1858).
Talasius, Buquet, Arcan. Nat. p. 100 (1859).

The following is the only described species:—

1. **Ecthœa quadricornis.** (Tab. IX. fig. 14.)

Cerambyx quadricornis, Olivier, Encycl. Méth. vii. p. 466 (1792); id. Ent. no. 67, p. 97, t. 20. f. 158.
Talasius quadricornis, Buquet, Arcan. Nat. p. 100, t. 5. f. 6.
Trachysomus faunus, Erichson, Wiegm. Arch. 1847, i. p. 148.

Hab. PANAMA, Chiriqui (*Ribbé*).—SOUTH AMERICA, Guiana, Amazons, Peru.

TRESTONIA.

Trestonia, Buquet, Arcan. Nat. p. 45.

Five or six species are known of this genus, confined, like the preceding, to Tropical America.

1. **Trestonia assulina.** (Tab. IX. fig. 15.)

Trestonia assulina, Bates, Trans. Ent. Soc. 1874, p. 226 [1].

Hab. NICARAGUA, Chontales (*Belt* [1]).

Group **HIPPOPSINI.**

Lacordaire's "groupes" Hippopsides, Spalacopsides, and Ischiolonchides, combined, form a natural assemblage of forms closely allied to Onciderini, but distinguished by the contraction of the crown of the head and the deflection of the lower part (with the mouth) downwards and backwards towards the prosternum—a peculiarity which is carried to an extreme in some of the genera, such as *Spalacopsis*, one of the most eccentric forms in the whole of the Longicornia. The less-specialized genera, such as *Dorcasta* and *Bebelis*, connect the group with the Ataxiini. Hippopsini are equally well represented in the Eastern and Western hemispheres, but they are most numerous in South-eastern Asia and its islands (including the Philippines) and in Tropical America, a few only being found in Africa, Tropical and Southern, and in temperate latitudes of America and Asia. One genus, *Calamobius*, occurs in Southern Europe.

HIPPOPSIS.

Hippopsis, Serville, Encycl. Méth. Ins. x. p. 336; id. Ann. Soc. Ent. Fr. 1835, p. 41.

Ten species have been described, from Tropical and Temperate America and from Tropical Asia and Africa.

1. **Hippopsis lineolata.** (Tab. IX. fig. 18.)

Hippopsis lineolata, Serville, Encycl. Méth. Ins. x. pp. 42, 336; id. Ann. Soc. Ent. Fr. 1835, p. 42, nota [1]; Bates, Trans. Ent. Soc. 1872, p. 202 [2].

Hab. MEXICO; GUATEMALA, San Gerónimo (*Champion*); NICARAGUA, Chontales (*Belt* [2], *Janson*).—SOUTH AMERICA, Brazil [1].

The comparison of a large series of specimens from North America (Texas), Central America, and South Brazil has led me to the conclusion that there is no valid difference between this species and *H. lemniscata* (Fab.) from the United States. The apex of the elytra varies in one and the same locality as to the amount of its prolongation; and it was only the silence of Fabricius as to there being any pointed prolongation in *H. lemniscata*

that induced Serville to consider the Brazilian form distinct. I have not had an opportunity of examining specimens from so far north as Carolina, whence the types of *H. lemniscata* were obtained; but some Texan specimens have the elytra quite as strongly acuminate as others from Rio de Janeiro. *H. griseola* (Bates) differs in the head being tumid behind the eyes, and *H. prona* in the great length of the head above, and the greater prolongation and obliquity of the forehead. In markings all these four are nearly identical; and the slight differences of form of the elytral apexes is clearly of no specific value.

SPALACOPSIS.

Spalacopsis, Newman, Ent. p. 305 (1842); Lacordaire, Gen. ix. p. 704.
Eutheiu, Guérin, Icon. Règne An., Ins. texte, p. 247 (1829–38), nom. præocc.
Euthuorus, Jacquelin Duval, De la Sagra, Hist. de Cuba, vii. p. 114 (1856).
Systene, Pascoe, Trans. Ent. Soc. ser. 2, iv. p. 264 (1857).

Three species, undoubtedly belonging to this genus, have been described, from Brazil, Mexico, and the West Indies. The genus *Tetraglenes* of South-eastern Asia is very closely allied to *Spalacopsis*.

1. Spalacopsis protensa.

Euthuorus protensus, Pascoe, Ann. & Mag. Nat. Hist. ser. 4, viii. p. 278, t. 13. f. 8 (1871)[1].

Hab. Mexico[1]; Guatemala, Capetillo (*Champion*).

2. Spalacopsis variegata.

Angustissima, fusiformis, pallide fusca, elytris nigro plagiatis; thorace indistincte fulvo lineato; scutello angusto, elongato; elytris basi depressis, postice convexis, apice divaricatis, singulis prolongatis acutis, dorso striato-punctatis utrinque bicostatis.

Long. $3\frac{1}{2}$–5 lin.

Hab. Guatemala, Calderas (*Champion*).

A remarkable species, distinguished by its elytra being gradually dilated towards the middle and furcate at the apex; the black spots cover the greater part of the surface, except near the base, and are more or less oblong and confluent.

DORCASTA.

Dorcasta, Pascoe, Trans. Ent. Soc. ser. 2, iv. p. 264 (1858).
Ægilopsis, Horn, Proc. Acad. Phil. xii. p. 571 (1860).
Bebelis, Thomson, Syst. Céramb. p. 110 (1864)?

Seven species have been described of this genus, which appears to be peculiar to the warmer latitudes of America, one species occurring as far north as Texas. *Bebelis* (Thomson) seems from the description to be congeneric with *Dorcasta*, and to be closely allied to those species which, although somewhat different in facies, have the same form

of antennal scape as the type species, viz. suddenly dilated at the base and forming there an angle, whence it is cylindrical to the apex. These species only differ from *D. oryx* in their somewhat less retracted forehead.

1. **Dorcasta oryx.**

Dorcasta oryx, Pascoe, Trans. Ent. Soc. ser. 2, iv. p. 264[1].

Hab. GUATEMALA, Zapote, San Gerónimo (*Champion*).—SOUTH AMERICA, Amazons[1].

Guatemalan specimens have the dark lines deeper in colour and generally more clearly defined than those from the Amazons, the sutural lines especially forming a well-marked blackish vitta.

2. **Dorcasta furcula.**

D. ligneæ (Bates) affinis, at minor posticeque magis attenuata. Linearis, thorace convexo elytrisque apice depressis furciformiter prolongatis; pallide fusca (haud setosa), lineis occipitis et thoracis rectis dorsalibus duabus nigris (hoc lateribus cinereo lineatis); elytris macula scutellari (cinereo marginata), alteris oblongis indistinctis lateralibus (lineolis cinereis interjectis) atro-fuscis; capite infra valde retracto, vertice profunde (inter tubera antennifera) sulcato, occipite elongato, recto; thorace cylindrico, ante medium paullulum dilatato; elytris fortiter lineatim punctatis; antennis robustis, dense pubescentibus, infra ciliatis.

Long. 3–3½ lin.

Hab. GUATEMALA, Dueñas, Capetillo (*Champion*).

3. **Dorcasta geometrica.**

Robustior, convexior, subcylindrica, tomento lævi ochraceo-fusco vestita, maculis lineisque atro-fuscis et cinereis eleganter variegata; capite antice angustato, vertice sulcato, tuberibus antenniferis obtusis, fronte valde retracta ochracea, genis utrinque fusco trifasciatis; thorace minus cylindrico, prope apicem angustato, juxta basin dilatato angulisque posticis acutis, dorso valde convexo, supra lineis atrofuscis et cinereis curvatis antice subconvergentibus; elytris basi depressis, postice convexis, prope apicem declivibus, apice suboblique truncatis angulo exteriore longe producto, supra lineatim punctulatis, macula semicirculari scutellari (nigro et cinereo anguste bimarginata), altera magna mediana suturali, ramos versus humeros et postice versus marginem emittente (cinereo marginata) alteraque ante apicem, atro-fuscis; antennis robustis, infra ciliatis.

Long. 3¾–4 lin.

Hab. GUATEMALA, Zapote (*Champion*); COSTA RICA (*Van Patten*).

An undescribed species, closely allied to this, is found in South Brazil.

Group **ACANTHODERINI.**

This group is equivalent to the subtribe Acanthoderitæ, formerly proposed by me to include a host of genera, chiefly Tropical-American, which have a smooth pyriform antennal scape, and distinct tubercle and groove on the outer side of the middle tibiæ. All have completely divergent tarsal claws; but the intermediate cotyloid cavities are not constant in the extent to which they are opened externally. I do not, however, find them quite closed in *Acanthoderes* and the allied genera, as Lacordaire states to be the case.

THRYALLIS.

Thryallis, Thomson, Archiv. Ent. i. p. 409 ; Lacordaire, Gen. Col. ix. p. 719.

This genus is characteristic of the fauna of Mexico and the countries immediately adjoining.

1. **Thryallis maculosus.** (Tab. IX. fig. 1.).

Thryallis maculosus, Thomson, Archiv. Ent. i. p. 409 [1].

Hab. Mexico [1], Orizaba (*Sallé*).

2. **Thryallis sallæi.**

T. maculoso similis, sed latior, præcipue postice latius rotundatus, minus convexus, multo subtilius punctulatus, elytris lateraliter abruptius declivibus. Fuscus, breviter griseo-pubescens ; capite supra et infra oculos thoraceque lateribus carneo-vittatis ; elytris pone medium juxta margines carneo-maculatis, supra post medium utrinque maculis tribus (e tomento elevato nigro) transversim recte ordinatis, maculaque magna sub humeros, alteris indistinctis prope basin et apice nigris ; femoribus apice tibiisque medio carneo-annulatis ; episternis carneo-maculatis ; antennis (♂) corpore duplo longioribus, nigris, articulis a tertio dimidio basali griseis.

Long. $5\frac{1}{2}$ lin. ♂.

Hab. Mexico, Cuernavaca (*Sallé*).

One example in M. Sallé's collection.

3. **Thryallis undatus.**

Thryallis undatus, Lacordaire, Gen. Col. ix. p. 720, nota [1].

Hab. Mexico [1], Toxpam (*Sallé*).

4. **Thryallis leucophæus.**

Anisocerus leucophæus, White, Cat. Long. Col. Brit. Mus. ii. p. 407 [1].

Hab. Guatemala (*Deby* [1]), San Juan, Vera Paz (*Champion*).

CHALASTINUS.

Chalastinus, Bates, Ann. & Mag. Nat. Hist. ser. 3, ix. p. 447.

Four species of this handsome genus are known, all Tropical-American.

1. **Chalastinus rubrocinctus.** (Tab. IX. fig. 3.)

Chalastinus rubrocinctus, Bates, Trans. Ent. Soc. 1869, p. 385 [1].

Hab. Nicaragua, Chontales (*Belt* [1], *Janson*).

GYMNOCERUS.

Gymnocerus, Serville, Ann. Soc. Ent. Fr. 1835, p. 84.

Peculiar to Tropical America. Eight species have been described.

1. **Gymnocerus belti.** (Tab. IX. fig. 4.)

Gymnocerus Beltii, Bates, Trans. Ent. Soc. 1872, p. 203 [1].

Hab. NICARAGUA, Chontales (*Belt* [1]).

ANISOCERUS.

Anisocerus, Serville, Ann. Soc. Ent. Fr. 1835, p. 80.

Also peculiar to Tropical America. Four species are known.

1. **Anisocerus palliatus.** (Tab. IX. fig. 2.)

Anisocerus palliatus, White, Cat. Long. Col. Brit. Mus. ii. p. 407 [1]; Bates, Trans. Ent. Soc. 1872, p. 203.

Anisocerus personatus, Bates, Trans. Ent. Soc. 1869, p. 385 [2].

Hab. GUATEMALA (*Deby* [1]); NICARAGUA, Chontales (*Belt* [2], *Janson*).

HOPLISTOCERUS.

Hoplistocerus, Bates, Ann. & Mag. Nat. Hist. ser. 3, ix. p. 456 (1862).

Demophoo, Thomson, Syst. Céramb. p. 21 (1864).

Five species of this genus, one of the most remarkable of the group, have been described, all Tropical-American. The Nicaraguan species recorded below is most nearly allied to the *H.* (*Demophoo*) *hamatus* of South Brazil.

1. **Hoplistocerus gemmatus.** (Tab. IX. fig. 5.)

Hoplistocerus gemmatus, Bates, Trans. Ent. Soc. 1874, p. 227 [1].

Hab. NICARAGUA, Chontales (*Belt* [1]).

POLYRHAPHIS.

Polyrhaphis, Serville, Ann. Soc. Ent. Fr. 1835, p. 26.

Eleven species of this conspicuous and well-marked genus are known, peculiar, like all the preceding genera of *Acanthoderini*, to Tropical America.

1. **Polyrhaphis fabricii.** (Tab. X. fig. 1.)

Polyrhaphis Fabricii, Thomson, Syst. Céramb. p. 542 [1]; Bates, Trans. Ent. Soc. 1872, p. 203 [2].

Hab. NICARAGUA, Chontales (*Belt* [2]).—SOUTH AMERICA, Cayenne [1].

2. **Polyrhaphis paraensis.** (Tab. X. fig. 2.)

Polyrhaphis paraensis, Bates, Ann. & Mag. Nat. Hist. ser. 3, ix. p. 404 [1]; Trans. Ent. Soc. 1872, p. 203 [2].

Hab. NICARAGUA, Chontales (*Belt* [2]).—SOUTH AMERICA, Venezuela [2], Amazons [1].

3. **Polyrhaphis angustata.** (*Polyrhaphis elongata*, Tab. X. fig. 3.)

Polyrhaphis angustata, Buquet, Ann. Soc. Ent. Fr. 1853, p. 444[1]; Bates, Trans. Ent. Soc. 1872, p. 236[2].

Hab. NICARAGUA, Chontales (*Belt*[2]).—SOUTH AMERICA, Cayenne[1], Amazons.

ACROCINUS.

Acrocinus, Illiger, Magaz. v. p. 247 (1806); Dalman in Schönh. Syn. Ins. 1, iii. p. 347, nota (1817) Serville, Ann. Soc. Ent. Fr. 1835, p. 16; Lacordaire, Gen. Col. ix. p. 733; Bates, Ann. & Mag. Nat. Hist. ser. 3, viii. p. 47.

Macropus, Thunberg, Götting. Gel. Anz. xxix. p. 282 (1805), nom. præocc.

Macropophora, (partim) Serville, Ann. Soc. Ent. Fr. 1835, p. 18; (partim) Thomson, Syst. Céramb. p. 15 (1864); Lacordaire, Gen. Col. ix. p. 734.

Four species are known of this conspicuous genus, which includes the well-known "Harlequin beetle" of collectors. The form is peculiar to Tropical America.

1. **Acrocinus longimanus.**

Cerambyx longimanus, Linnæus, Syst. Nat. ed. 10, i. p. 388.

Prionus longimanus, Olivier, Ent. no. 66, p. 6, t. 2. f. 12 *b* et f. 12 *c*.

Acrocinus longimanus, Serville, Ann. Soc. Ent. Fr. 1835, p. 17.

Hab. MEXICO; BRITISH HONDURAS, R. Sarstoon (*Blancaneaux*); GUATEMALA, Coban (*Sarg.*); NICARAGUA, Chontales (*Belt*).—SOUTH AMERICA to Santa Catharina, South Brazil.

Misiones, Argentina
Teste F. Monrós 1953

The colouring of this extraordinary insect becomes less rich in the more northerly parts of its range. The finest and brightest-hued examples are from South Brazil.

OREODERA.

Oreodera, Serville, Ann. Soc. Ent. Fr. 1835, p. 19.

Thirty-six species of this genus have been described. Like *Acrocinus*, to which it is closely allied, the group is peculiar to and highly characteristic of the Tropical-American fauna. The genus does not appear to occur beyond the tropics; nor is any species recorded from the West-Indian Islands.

1. **Oreodera glauca.** (Tab. X. fig. 6.)

Cerambyx glaucus, Linnæus, Syst. Nat. ed. 10, i. p. 390; ed. 12, ii. p. 626.

Lamia glauca, Fabricius, Ent. Syst. ii. p. 274.

Lamia Spengleri, Fabricius, Ent. Syst. ii. p. 291.

Oreodera glauca, Serville, Ann. Soc. Ent. Fr. 1835, p. 20[1]; Bates, Trans. Ent. Soc. 1872, p. 203[2].

Hab. MEXICO, Oaxaca (*Sallé*); NICARAGUA, Chontales (*Belt*[2]).—SOUTH AMERICA, Guiana, Amazons[1].

2. **Oreodera verrucosa.** (Tab. X. fig. 4.)

Oreodera verrucosa, Bates, Trans. Ent. Soc. 1872, p. 204 [1].

Hab. NICARAGUA, Chontales (*Belt* [1]), Javali (*Seemann*).

3. **Oreodera canotogata.** (Tab. X. fig. 7.)

Oreodera canotogata, Bates, Trans. Ent. Soc. 1872, p. 203 [1].

Hab. NICARAGUA, Chontales (*Belt* [1], *Janson*).

4. **Oreodera granulifera.** (Tab. X. fig. 8.)

Oreodera granulifera, Bates, Trans. Ent. Soc. 1872, p. 204 [1].

Hab. NICARAGUA, Chontales (*Belt* [1]).

5. **Oreodera semialba.** (Tab. X. fig. 5.)

Oreodera semialba, Bates, Trans. Ent. Soc. 1874, p. 228 [1].

Hab. NICARAGUA, Chontales (*Belt* [1]).

6. **Oreodera c-album.** (Tab. X. fig. 9.)

Oreodera c-album, Bates, Trans. Ent. Soc. 1872, p. 204 [1].

Hab. NICARAGUA, Chontales (*Belt* [1]).

7. **Oreodera costaricensis.** (Tab. X. fig. 10.)

Oreodera costaricensis, Thomson, Syst. Céramb. p. 542 [1]; Bates, Trans. Ent. Soc. 1872, p. 205 [2].

Hab. NICARAGUA, Chontales (*Belt* [2], *Janson*); COSTA RICA [1].

8. **Oreodera inscripta.** (*Oreodera inscriptipennis*, Tab. X. fig. 11.)

Oreodera inscripta, Bates, Trans. Ent. Soc. 1872, p. 205 [1].

Hab. NICARAGUA, Chontales (*Belt* [1]).

9. **Oreodera corticina.**

Oreodera corticina, Thomson, Syst. Céramb. p. 542 [1].

Hab. MEXICO [1], Cordova (*Sallé*).

According to an example in M. Sallé's collection this species is closely allied to *O. inscripta,* having nearly the same peculiar markings; but it is a larger insect, more narrowed behind and with high basal tufts to the elytra.

10. **Oreodera obsoleta.** (Tab. X. fig. 12.)

Oreodera obsoleta, Bates, Trans. Ent. Soc. 1874, p. 228 [1].

Hab. NICARAGUA, Chontales (*Belt* [1]).

11. **Oreodera purpurascens.**

O. costaricensi quoad formam similis. Modice elongata, purpurascenti-fusca, subsericea, elytris utrinque penicillis parvis nigris prope basin duabus transversim positis, fasciis posterioribus valde irregularibus (prima tenui et undulata) nigris, crista parva centro-basali e pilis erectis pallido-fuscis; thorace tuberculis duobus antico-dorsalibus; elytris dorso paullo inæqualibus, punctatis, apice fere rotundatis; antennis articulis omnibus apice nigris (tertio medio nigro-annulato); tibiis annulis duobus nigris; ♂ tarsorum anticorum articulo unguiculari dilatato.

Long. 6 lin.

Hab. GUATEMALA, Capetillo, San Gerónimo (*Champion*).

The two tufts of black hair side by side on each elytron and the general colour amply distinguish this species from *O. costaricensis*; the former character, however, it possesses in common with *O. fasciculosa* (Thomson), from which it is well distinguished by the absence of tufts from the posterior part of the elytra and other characters.

12. **Oreodera hispida.**

Oblongo-subovata, fuliginoso-fusca, elytris partim (apud suturam et apicem) pallidioribus lituraque curvata utrinque discoidali alba; setis elongatis griseis vestita, elytris fasciculis (e setis nigris) plurimis prope basin et pone medium hispidis; thorace tuberculis duobus validis anticis alterisque tribus minoribus posterioribus, lateralibus conicis sulco curvato profundo basi cinctis, interstitiis grosse punctatis; elytris grosse discrete punctatis, apice breviter truncatis; pedibus validis, ♂ tarsorum anticorum articulo unguiculari valde dilatato; antennis piceo-rufis, articulis basi (1.–6. basi et medio) pallidis.

Long. $4\frac{1}{2}$–$5\frac{1}{2}$ lin.

Hab. GUATEMALA, San Juan, Vera Paz (*Champion*).

Differs from all the preceding in being clothed with long hairs. The tufts of short hair on the elytra are on each side about eight in number (including some of minor size): three (the outermost very small) lie in nearly a transverse line in the usual place near the base; the others are spread over the disk near, and a little behind, the middle. The femora are excessively thickened.

13. **Oreodera fasciculosa.**

Oreodera fasciculosa, Thomson, Syst. Céramb. p. 542.

Hab. MEXICO, Cordova (*Sallé*).

A specimen, doubtless authentically named, in M. Sallé's collection, represents a species very closely allied to *O. hispida*; but Thomson's description does not very well apply to it, as it omits to mention the long hairs with which the insect is clothed, and the numerous tufts of black bristles on the posterior part of the elytra near the suture. M. Sallé's specimen is distinguished from *O. hispida* only by its lighter brown colour and by the very oblique truncature of the elytra.

ALPHUS.

Alphus, Thomson, Class. Long. p. 10; Bates, Ann. & Mag. Nat. Hist. ser. 3, ix. p. 121; Lacordaire, Gen. Col. ix. p. 741.

Nine species of this distinct genus have been described, all Tropical-American. It is a form which, with *Myoxinus* and allied genera, bridges over the interval between the two groups Acanthoderini and Acanthocinini, the antennal scape being less evenly clavate, with a tendency to flexuous outline of the under surface.

1. **Alphus cavifrons.** (Tab. X. fig. 15.)

Alphus cavifrons, Bates, Trans. Ent. Soc. 1872, p. 206 [1].

Hab. NICARAGUA, Chontales (*Belt* [1], *Janson*).

Var. (Tab. XI. fig. 1.)

Minor, rufescenti-fuscus (an immaturus?), thorace lateribus elytrisque, apice exceptis, cinereo-nebulosis. Long. 5 lin.

Hab. NICARAGUA, Chontales (*Belt*).

2. **Alphus centrolineatus.**

Alphus centrolineatus, Bates, Ann. & Mag. Nat. Hist. ser. 3, ix. p. 122 [1]; id. Trans. Ent. Soc. 1872, p. 206 [2].

Hab. NICARAGUA, Chontales [2].—SOUTH AMERICA, Amazons [1].

MYOXINUS.

Myoxinus, Bates, Ann. & Mag. Nat. Hist. ser. 3, ix. p. 120 (1862); Lacordaire, Gen. Col. ix. p. 742.

Mysopsis, Thomson, Syst. Céramb. p. 16 (1864).

Acanthoderes (partim), Erichson, Wiegm. Archiv, 1847, i. p. 144.

There is little to distinguish this genus from *Alphus*, especially from the section having tuberculated basal crests on the elytra. The outline of the antennal scape is somewhat different, not being flexuous beneath near the apex; and another minor character is the bituberculated mesosternum. Four or five species are known in collections, all from Tropical America but only one has previously been described.

1. **Myoxinus pictus.** (Tab. X. fig. 16).

Acanthoderes pictus, Erichson, Wiegm. Archiv, 1847, i. p. 144 [1]; Bates, Ann. & Mag. Nat. Hist. ser. 3, ix. p. 121 [2]; id. Trans. Ent. Soc. 1872, p. 206 [3].

Hab. NICARAGUA, Chontales (*Belt* [3], *Janson*).—SOUTH AMERICA, Peru [1], Amazons [2].

2. **Myoxinus asper.**

M. picto major, fuscus, macula communi elytrorum suturali antice utrinque ramum emittente posticeque dilatata obscure ochracea; antennis ochraceo-fuscis, articulis singulis nigro-biannulatis; thorace dorso

nigricanti crebre punctato, quinquetuberculato, tuberculis duobus anticis valde elevatis, spina laterali parva; elytris utrinque tuberculorum seriebus quinque, cristis basalibus serratis valde elevatis, interstitiis aspere ac conspicue punctatis.

Long. $5\frac{1}{2}$ lin.

Hab. MEXICO, Orizaba (*Sallé*), S.W. Yucatan (*Dr. Horn*); NICARAGUA, Chontales (*Belt*).

Closely allied to *M. pictus*, but distinguished at once by the absence of black spots and belts from the elytra and by the more uniform brown colour and more conspicuous punctuation of the same.

ECYRUS.

Ecyrus, Leconte, Journ. Acad. Phil. ser. 2, ii. p. 160; Lacordaire, Gen. Col. ix. p. 651.

A genus founded on a North-American species, the *Lamia dasycera* of Say, the only one, according to Lacordaire, to which its characters apply. He places it in his "groupe" Pogonochérides; but its structural characters and the facies of the insects point rather to an affinity with *Alphus* and *Myoxinus*. The following Mexican species is perfectly congeneric with *E. dasycerus*:—

1. **Ecyrus penicillatus.**

Oblongus, convexus, cano-tomentosus; elytris fascia latissima ante medium fusca; antennis fuscis cano variegatis, subtus dense ciliatis, scapo cylindrico haud elongato juxta basin undique angustato, articulis 2°–3ᵐ elongatis paullo curvatis; capite angusto, vertice (ut in *E. dasycero*) bituberculato, fronte elongata; thorace antice gradatim angustato, disco anteriore valde convexo et tuberoso; elytris grosse haud profunde striato-punctatis, utrinque penicillis tribus nigris lineatim digestis.

Long. $4\frac{1}{4}$–$5\frac{1}{2}$ lin.

Hab. MEXICO, Mirador, Vera Cruz (*Sallé*).

ÆTHOMERUS.

Æthomerus, Thomson, Class. Long. p. 338; Lacordaire, Gen. Col. ix. p. 742.

Macronemus, Dejean, Cat.; White, Cat. Long. Col. B. M. ii. p. 376 (nom. præocc. et sine descr.).

Eight species have been described of this singular genus, peculiar to Tropical America.

1. **Æthomerus antennator.** (Tab. XI. fig. 2.)

Lamia antennator, Fabricius, Syst. El. ii. p. 288[1].

Æthomerus antennator, Bates, Ann. & Mag. Nat. Hist. ser. 3, ix. p. 118[2]; id. Trans. Ent. Soc. 1872, p. 206[3].

Hab. NICARAGUA, Chontales (*Belt*[2]).—SOUTH AMERICA, Guiana[1], Amazons[2].

The tubercles and ridges are much more prominent in the single Chontales specimen than they are in those from Cayenne and the Amazons; and I doubt therefore whether it is not a slender example of the following species.

2. Æthomerus asperulus.

Æthomerus asperulus, White, Cat. Long. Col. Brit. Mus. ii. p. 376[1].

Hab. Nicaragua, Chontales (*Belt*, *Janson*).—South America, Venezuela[1].

STEIRASTOMA.

Steirastoma, Serville, Ann. Soc. Ent. Fr. 1835, p. 24; Lacordaire, Gen. Col. ix. p. 747.

Sixteen species of this well-marked genus are known, all Tropical-American. They are amongst the commonest Longicorns of the countries where they are found.

1. Steirastoma histrionica *. (Tab. X. fig. 18.)

Steirastoma histrionica, White, Cat. Long. Col. Brit. Mus. ii. p. 354 (1855)[1]; Bates, Trans. Ent. Soc. 1872, p. 206[2].

Steirastoma larva, Thomson, Class. Long. pp. 6, 336 (1860).

Hab. Mexico, Orizaba (*Sallé*), Misantla (*Höge*); British Honduras[1], Belize (*Blancaneaux*); Nicaragua, Chontales (*Belt*[2], *Janson*).

2. Steirastoma larva.

Steirastoma larva, Chevrolat, Journ. of Ent. i. p. 186 (1862).

Hab. Costa Rica, Caché (*Rogers*); Panama.—South America, Colombia.

3. Steirastoma melanogenys. (Tab. X. fig. 17.)

Steirastoma melanogenys, White, Cat. Long. Col. Brit. Mus. ii. p. 355[1]; Bates, Trans. Ent. Soc. 1872, p. 236[2].

Hab. Nicaragua, Chontales[2].—South Ameerica, Cayenne, Amazons[1].

4. Steirastoma senex. (Tab. X. fig. 19.)

Steirastoma senex, White, Cat. Long. Col. Brit. Mus. ii. p. 353[1]; Bates, Trans. Ent. Soc. 1872, p. 206[2].

Hab. Mexico[1], Orizaba (*Sallé*); Nicaragua, Chontales (*Belt*[2]).

5. Steirastoma albiceps. (Tab. X. fig. 20.)

Steirastoma albiceps, Bates, Trans. Ent. Soc. 1872, p. 207[1].

Hab. Nicaragua, Chontales (*Belt*[1]).

6. Steirastoma anomala.

Latiuscula et breviuscula, depressa, sordide grisea, elytris fasciis inconspicuis duabus obscurioribus, posteriore intus versus apicem deflecta; oculis parvis; thorace tuberculis lateralibus magnis fere simplicibus, apice tantum bifidis, cuspide anteriore minore, dorso medio depresso tuberculis anticis duobus obliquis nigro-nitidis; elytris cristis tuberculiferis duabus basalibus curvatis, antice (versus thoracem) porrectis,

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* The founder of the genus and inventor of the word *Steirastoma* made it feminine.

carina discoidali partim obsoleta, supra inæqualibus velut undulatis, apice acute rotundatis; antennis (♂) quam corpus dimidio longioribus, filiformibus, scapo (apice extus tumido) griseo-fusco, cæteris articulis apice nigris 4o–11m basi canis; sternis latis, planis; femoribus intermediis longissime pedunculatis, apicee abrupte clavatis.

Long. $7\frac{1}{4}$ lin. ♂.

Hab. Mexico, Puebla (*Sallé*).

This singular species comes nearest in some of its characters to *S. depressa*. I have seen only a single example, in M. Sallé's collection.

ACANTHODERES.

Acanthoderes, Serville, Ann. Soc. Ent. Fr. 1835, p. 29; Lacordaire, Gen. Col. ix. p. 753.
Psapharochrus, Thomson, Syst. Céramb. p. 19; Lacordaire, Gen. Col. ix. p. 750.
Symperasmus, Thomson, Syst. Céramb. p. 19.

About sixty species of this genus are known, nearly all from Tropical America, a few only existing in temperate latitudes in North America, Europe, and Northern Asia, and in Tropical Western Africa. Notwithstanding the considerable diversity among its species in important points of structure, or rather in consequence of this diversity, which is too abrupt and irregular for systematic purposes, it is impossible satisfactorily to divide the genus. At any rate the division into the two genera sanctioned by the high authority of Lacordaire seems to me impossible to be maintained, one of these two genera (*Psapharochrus*) comprehending forms like the European *A. varius* and the South-Brazilian *A. cylindricus*, *melanostictus*, &c., which are among the most disparate the old genus contained. One of the results of the narrow definitions which Lacordaire was induced to impose, as he confessed, is that some species are left out altogether, without generic location; and, in fact, if the genus is disintegrated, nothing less than a very minute subdivision will satisfy the sense of natural grouping. For this there is no adequate reason, as the genus, in the aggregate, is well defined and easily to be recognized.

1. **Acanthoderes rubripes.**

Acanthoderes rubripes, Bates, Trans. Ent. Soc. 1872, p. 208.

Hab. Nicaragua, Chontales (*Belt*).

2. **Acanthoderes lævicollis.** (Tab. XI. fig. 5.)

Acanthoderes lævicollis, Bates, loc. cit.

Hab. Nicaragua, Chontales (*Belt*).

This and the preceding species would be typical *Acanthoderes* according to Lacordaire, being closely allied to *A. daviesi* and *A. swederi*. They differ, however, very considerably from *A. swederi* in the structure of the antennæ, the third and fourth joints being

thickened at the apex and clothed on the dilated part with long, laid, silky hairs, and the terminal joints shortened.

3. **Acanthoderes lacrymans.** (*Pteridotelus lachrymosus*, Tab. XI. fig. 6.)

Pteridotelus lacrymans, Thomson, Syst. Céramb. p. 544[1].

Hab. Mexico[1], Puebla, Oaxaca (*Sallé*).

Belongs to a group of species in which the terminal joints of the antennæ are much shortened; but it stands almost alone in this group in the almost rounded apex and faint longitudinal carinæ of the elytra, and thus connects it with the following species, for which Lacordaire could find a place in no described genus. Traces of hair-tufts at the apexes of the third and fourth antennal joints indicate also a relationship to *Tetrasarus*.

4. **Acanthoderes funerarius.** (Tab. XI. figg. 3, 4.)

Acanthoderes funerarius, Bates, Ann. & Mag. Nat. Hist. ser. 3, viii. p. 151, nota.
Var. *Myoxomorpha Erichsonii*, Thomson, Physis, ii. p. 147.

Hab. Mexico, San Luis Potosi (*Dr. Palmer*), near the capital (*Flohr*), Jalapa (*Höge*), Oaxaca, var. *erichsoni* (*Sallé*).

5. **Acanthoderes circumflexus.**

Acanthoderus circumflexus, Jacquelin Duval, in Sagra's Hist. Cuba, An. Art. p. 270[1].
Acanthoderes circumflexus, Bates, Trans. Ent. Soc. 1872, p. 207[2].
Acanthoderes mexicanus (Dej.), Harold & Gemm. Cat. Col. x. p. 3146.

Hab. Mexico, Cordova (*Sallé*), Misantla (*Höge*); Guatemala, Zapote, Tamahu, Vera Paz, San Miguel, 1500 feet (*Champion*); Nicaragua, Chontales (*Belt*[2], *Janson*); Costa Rica, Caché (*Rogers*); Panama, Matachin (*Schunke*).—West Indies, Cuba[1], Santiago de Cuba (*Carter*); South America, Colombia, Venezuela.

6. **Acanthoderes inquinatus.** (Tab. XI. fig. 8.)

Acanthoderes inquinatus, Bates, Trans. Ent. Soc. 1872, p. 207[1].

Hab. Nicaragua, Chontales (*Belt*[1], *Janson*).

7. **Acanthoderes bivitta.** (Tab. XI. fig. 9.)

Steirastoma bivitta, White, Cat. Long. Col. Brit. Mus. ii. p. 354[1].
Acanthoderes bivitta, Bates, Ann. & Mag. Nat. Hist. ser. 3, viii. p. 476[2]; id. Trans. Ent. Soc. 1874, p. 228[3].

Hab. Nicaragua, Chontales (*Belt*[3], *Janson*).—South America, Amazons[1 2].

8. **Acanthoderes lugens.**

Psapharochrus lugens, Thomson, Syst. Céramb. p. 543[1].

Hab. Mexico[1], Orizaba (*Sallé*).

9. **Acanthoderes nigritarsis.**

Acanthoderes nigritarsis, White, Cat. Long. Col. Brit. Mus. ii. p. 363.

Hab. Mexico [1].

10. **Acanthoderes sallæi.**

Psapharochrus sallei, Thomson, Syst. Céramb. p. 543 [1].

Hab. Mexico [1], Cordova (*Sallé*).

11. **Acanthoderes clericus.**

Latus, subdepressus, fuscus, nigro-piperitus elytrisque atro-fusco indistincte trifasciatis; fronte lata et plana, infra oculos dilatata; thorace tuberculis lateralibus longissimis, acutis, dorsalibus conicis, validis lineaque dorsali angusta elevata, interstitiis punctatis; elytris postice modice rotundato-angustatis, apice breviter suboblique sinuato-truncatis, dorso breviter nigro-setosis, versus basin tuberculis parvis haud crebre asperatis, postice punctatis, utrinque obtuse costatis, costis ad basin multo magis elevatis; antennis ♀ curtis, setiformibus, atro-fuscis, articulis a 3° basi (3° et 4° medio annulatis) griseis, articulis apicalibus simplicibus angustis; sternis latis, haud tuberculatis.

Long. 8 lin. ♀.

Hab. Mexico, Puebla (*Sallé*).

12. **Acanthoderes doctus.**

Elongatus, convexus, griseo-fuscus, elytris nigro-punctatis, ante medium plaga cinerea, lituraque nigra M-formi pone medium et altera Λ-formi ante apicem ornatis; antennis pedibusque rufescenti-fuscis carneo-griseo annulatis, illis articulis apicalibus linearibus simplicibus; fronte magna, plana, infra dilatata; vertice nigro-bipunctato; thorace tuberculis lateralibus et dorsalibus validis, conicis (illis apice acutissimis) interstitiis pleurisque usque ad coxas grosse punctatis; elytris apice breviter transversim sinuato-truncatis, dorso obtuse costatis, costa utrinque versus basin curvata et elevata, punctis sparsis nigro-setiferis, versus basin tuberculatis; mesosterno bituberculato; pedibus longe hirsutis.

Long. $8\frac{1}{2}$ lin. ♀.

Hab. Mexico, Juquila (*Sallé*).

Closely allied to *A. cylindricus* of South Brazil, and having a similar large flattened forehead; the clearly-traced, thin letter-like markings of the elytra amply distinguish it.

13. **Acanthoderes sylvanus.**

Robustus, minus elongatus, postice angustatus, purpurascenti-fuscus, nigro-punctatus, elytris utrinque ante medium macula elongata obliqua cinereo-flava; antennis robustis, setaceis, nigris, articulis basi (3° et 4° quoque medio) cinereis; thorace tuberculis lateralibus magnis paulo antice curvatis, dorsalibus elongatis subcompressis apice crenatis, carinaque dorsali postice dilatata, interstitiis grosse punctatis; elytris subtrigonis, apice fere recte truncatis, dorso utrinque carinatis, carinis versus basin curvatis et elevatis; basi sparsim tuberculatis; corpore subtus pedibusque rufo-tomentosis.

Long. 8 lin. ♂.

Hab. Mexico, Oaxaca (*Sallé*).

14. **Acanthoderes cornutus.**

Latiusculus, convexus, purpurascenti-fuscus, elytris fasciis incompletis tribus atro-fuscis, prima (versus basin) lituram communem cineream arietinam includente; fronte magna, planata; thorace tuberculis dorsalibus maxime elevatis apice truncatis, lateralibus conicis, linea dorsali elevata, interstitiis punctatis; elytris postice modice rotundato-angustatis, apice breviter sinuato-truncatis; dorso atro-fusco punctatis, bicostatis, costa interiore juxta marginem basalem maxime elevata, compressa et tuberculata; antennis atro-fuscis, articulis a 2° basi albis, 3° et 4° medio albo annulatis, apicalibus simplicibus; corpore subtus medio nigro.

Long. $7\frac{1}{2}$ lin. ♀.

Hab. GUATEMALA (*Sallé*).

One example of this well-marked species (allied to *A. clericus* and *A. sylvanus*), in M. Sallé's collection.

TETRASARUS.

Acanthoderi circumflexo et affinibus certe affinis, at differt antennarum articulis 3° et 4° scopiferis. Corpus minus elongatum. Oculi subgrosse granulati. Antennæ utroque sexu articulis 3° et 4° cæteris multo longioribus, apice scopis e pilis elongatis sericeis vestitis; ♂ articulis 9°–11^{m} valde abbreviatis, infra setosis. Thorax dorso valde bituberculatus. Elytra dorso minus forte carinata, juxta apicem angustata. Tibiæ anticæ ♂ versus apicem dilatatæ, ♀ simplices.

Thomson, in describing the first species of this form as a *Discopus* (a genus in which the third antennal joint only has a thick tuft of hairs), said that it merited to form a division apart. The tufting of the antennæ, however, proves to be distinctive of two groups of species of which well-defined genera can be formed, distinguished by the general form of the body as well as by the antennæ. There is a further distinction also in the shape of the tufts, which in *Discopus* encircle the joint all round, and in *Tetrasarus* leave one side of the joints naked. The broad mesosternum in most of the species is steeply declivous in front and bituberculated, as in *Acanthoderes swederi*; in others it is unarmed.

The genus seems peculiar to Guatemala and the adjoining countries north and south.

1. **Tetrasarus quadriscopulatus.**

Discopus quadriscopulatus, Thomson, Physis, ii. p. 146[1].

Hab. GUATEMALA[1], Zapote (*Champion*).

2. **Tetrasarus inops.**

Depressus, carneo-fuscus, elytris post medium fasciis incompletis angustis valde undatis, nigris, apice angustatis, oblique sinuato-truncatis, angulo exteriore paullulum producto, dorso obtuse costatis; antennis (♀) nigris, articulis 3°–11^{m} basi griseo-albis; corpore subtus medio nigro; mesosterno arcuato, simplici; tibiis nigro biannulatis, tarsis griseis articulis 2°–3^{m} nigris.

Long. 5 lin. ♀.

Hab. MEXICO (*H. Deyrolle, coll. Bates*), Parada, Oaxaca (*Sallé*).

3. **Tetrasarus pictulus.** (*Discopus quadriscopulatus*, Tab. XI. fig. 7.)

Discopus quadriscopulatus, Bates, Trans. Ent. Soc. 1872, p. 208[1].

Oblongo-ovatus, convexior; griseus, maculis et fasciis nigris fulvo marginatis; capite thoraceque olivaceo-fuscis, fulvo variegatis, hoc sparsim punctato tuberibus lateralibus latis minus prominulis; elytris postice rotundatim angustatis, apice recte breviter sinuatim truncatis angulis vix prominulis, dorso obsolete carinatis, sparsim punctatis, griseis, semifasciis incompletis duabus postmedianis, maculisque et guttis plurimis atro-fuscis fulvo marginatis; antennis fuscis, articulis 3° et 4° basi et apice, 5°–11^{m} basi griseis; tibiis atro-fuscis annulo medio fulvo; tarsis articulis 1° et 4° griseis, 2° et 3° nigris; mesosterno bituberculato.

Long. $5\frac{1}{2}$ lin. ♂.

Hab. NICARAGUA, Chontales (*Belt*[1]).

Having since received specimens from Guatemala which accord better, both as to colours and locality, with Thomson's description of *D. quadriscopulatus*, it is necessary to describe the Nicaraguan insect as a different species. Besides its more variegated coloration, it differs in being more ovate and convex, and in the antennæ being much longer in the male and the elytra more transversely truncated.

4. **Tetrasarus callistus.**

Latior, depressus, griseus, lætissime variegatus; fronte fulvescenti-fusca lateribus flavis; occipite medio maculis duabus nigris extus utrinque macula flava marginatis; thorace grosse sparsim punctato, lateribus flavis nigro maculatis, dorso purpureo-fusco; elytris subtrigonis, apice breviter transversim subsinuatim truncatis angulis haud productis, dorso utrinque obsolete bicostatis, griseo et fulvo lineatis, maculis guttisque nigris inspersis, et fascia irregulari prope basin flava nigro marginata; antennis nigris, articulis 3° et 4° griseo biannulatis, 5°–11^{m} basi griseis; pedibus nigris, femoribus tibiisque flavo annulatis; tarsis articulis 1° et 4° griseis, 2°–3° nigris; corpore subtus griseo, fulvo maculato; mesosterno bituberculato.

Long. $6\frac{1}{2}$ lin. ♂.

Hab. GUATEMALA, Capetillo (*Champion*).

Allied to *T. pictulus*, but distinguished by its broader and more depressed form, and the ochreous-yellow sides of the thorax and elytral fascia, which latter consists of a large bilobed spot near each side, connected with the suture by a very flexuous yellow line. Mr. Champion has sent home only one example.

5. **Tetrasarus albescens.**

Oblongus, convexiusculus, niger, supra albo-tomentosus nigro-guttatus et plagiatus; antennis robustis, articulis basi cinereis, 2° apice dilatato, 3° sulcato, 8°–11^{m} (♀?) abbreviatis intus dense breviter ciliatis; thorace punctato, tuberibus dorsalibus minus elevatis nigro-lineatis; elytris versus apicem paullo rotundatis, apice recte breviter truncatis, supra vix conspicue carinatis sparsim grosse nigro-punctatis, plagis indefinitis utrinque 4 vel 5 atro-fuscis (una humerali, 2^{a} discoidali ante medium, 3^{a} laterali post medium, 4^{a} et 5^{a} parvis prope apicem); pedibus robustis, nigris, tibiis cinereo biannulatis; tarsis articulo 1° et 4° cinereis.

Long. 6 lin.

Hab. MEXICO, Panistlahuaca (*Sallé*).

PLAGIOSARUS.

Genus *Tetrasaro* proxime affine, at differt antennis multo brevioribus, articulo tertio solum penicillato, penicillo compresso, articuli latera haud amplectente, quarto abbreviato simplici. Cæteri characteres ut in *Tetrasaro*.

This genus is necessary for the reception of a species which differs from *Tetrasarus* in the fourth antennal joint being quite destitute of hair-tuft, and the third joint furnished with a tuft which adheres only to the lower surface without embracing the sides, as it does to a smaller or greater extent in *Tetrasarus*. From *Discopus*, in which also the tufts are confined to the third joint, the genus differs (besides the different shape of the tuft) by the form of the elytra, which are not depressed along the suture, or furnished with a strongly elevated longitudinal carina. The following sole species at present known of this genus is very differently marked from any of the numerous species of *Acanthoderes* and allied genera.

1. **Plagiosarus binoculus.**

Fulvescenti-fuscus, elytris utrinque post medium macula transversa atro-fusca fulvo anguste marginata; antennis nigris, articulis basi (tertio quoque medio) carneo-griseis; thorace tuberibus dorsalibus et lateralibus validis conicis lineaque dorsali paullo elevata, interstitiis punctatis; elytris mox a basi gradatim, post medium citius angustatis, apice transversim breviter sinuato-truncatis, supra sparsim (versus basin aspere) punctatis.

Long. $5\frac{1}{2}$ lin.

Hab. Mexico, Toxpam (*Sallé*).

Group **ACANTHOCININI.**

In this group I propose to include Lacordaire's Acanthocinides (with the exception of a few genera which he associated with *Exocentrus* in one of his sections) and his Colobotheides. With very few exceptions they are distinguished from all other Lamiadæ by their elongate antennal scape, of which the undersurface is flexuous; and the great majority of the genera and species are peculiar to America.

LAGOCHIRUS.

Lagochirus, Erichson, Wiegm. Archiv, 1847, i. p. 144.
Lagocheirus, Lacordaire, Gen. Col. ix. p. 762 (1872).

A characteristic American genus. One of its species ranges over the whole of the tropical zone, including the West Indies, and passes into temperate latitudes in North America, and is found still further at Tahiti and other islands of the Pacific. The others are local, by far the greater number being confined to limited areas in Central America and Mexico. About a dozen species are known.

1. **Lagochirus araneiformis.**

Cerambyx araneiformis, Linn. Syst. Nat. ed. xii. p. 625; Drury, Ins. ii. p. 66, t. 35. f. 4 (index).
Acanthoderus araneiformis, Jacquelin Duval, Sagra, Hist. Cuba, An. Art. p. 271, t. 11. f. 2[1].
Lagocheirus araneiformis, Bates, Trans. Ent. Soc. 1872, p. 209[2].

Hab. MEXICO, Misantla (*Höge*); BRITISH HONDURAS, river Sarstoon, Belize (*Blancaneaux*); GUATEMALA, Capetillo, San Gerónimo, San Juan, Vera Paz (*Champion*); NICARAGUA[2] (*Belt, Janson*); COSTA RICA, Irazu (*Rogers*).—WEST INDIES[1]; SOUTH AMERICA, Guiana, Amazons; OCEANIA, Tahiti, Sandwich Islands.

2. **Lagochirus obsoletus.**

Lagocheirus obsoletus, Thomson, Classif. Long. p. 10[1]; Bates, Trans. Ent. Soc. 1874, p. 229[2].

Hab. MEXICO[1], Cordova (*Sallé*); NICARAGUA, Chontales (*Belt*[2]).

According to a specimen in M. Sallé's collection, which is evidently correctly named, this species differs from *L. araneiformis*, not only by the dark transverse markings of the elytra being obsolete, but by the antennæ being ringed with pale ashy, joints 3 to 6 being biannulate; the whole upper surface is also minutely punctured, and the apex of the elytra more sharply truncated. Mexican examples of *L. araneiformis*, especially those of small size, have a tendency towards ringed antennæ. A male specimen taken by Mr. Belt differs from the above-mentioned Mexican example in being less punctured towards the apex of the elytra, and connects the species with the *L. longipennis*.

3. **Lagochirus binumeratus.** (Tab. XI. fig. 11.)

Lagocheirus binumeratus, Thomson, Classif. Long. p. 9[1]; Bates, Trans. Ent. Soc. 1872, p. 210[2].
Lagocheirus v-album, Bates, Trans. Ent. Soc. 1869, p. 386.

Hab. MEXICO[1], Toxpam (*Sallé*), Misantla (*Höge*); BRITISH HONDURAS, Belize (*Blancaneaux*); NICARAGUA, Chontales (*Belt*[2], *Janson*).

The specimen figured is from Chontales.

4. **Lagochirus longipennis.**

L. obsoleto similis, at differt elytris longioribus et parallelis: oblongus, cinereo-fuscus, thorace lineis abbreviatis duabus posticis elytrisque macula laterali nigro-fuscis velutinis; antennis fuscis, articulis 3°–6ᵐ griseo biannulatis, 7°–11ᵐ medio uniannulatis; thorace obtuse tuberoso, punctato; elytris haud profunde (apicem versus obsolete) punctulatis, costis brevissime (versus basin altius) nigro-penicillatis, lineis transversis undulatis fuscis duabus posticis vix conspicuis; tarsis griseo-fuscis.

Long. $7\frac{1}{2}$–$8\frac{1}{2}$ lin. ♂.

Hab. BRITISH HONDURAS, river Sarstoon (*Blancaneaux*); GUATEMALA, Capetillo (*Champion*).

Differs from *L. obsoletus* conspicuously by its much more elongated elytra; in colour, but especially in the almost obliterated dark and light transverse markings of the posterior part of the elytra, the two species agree, differing thus from nearly all their congeners. I have seen only males of either species. The tubers of the thorax, both dorsal and lateral, are obtuse.

5. **Lagochirus rogersi.** (Tab. XI. fig. 15.)

L. araneiformi similis, sed multo magis elongatus: robustus, fuscus, elytris macula laterali fasciaque dentata submaculari posteriore nigro-fuscis, lituris transversis post medium lateraliter confluentibus cinereis; antennis olivaceo-fuscis, cinereo obscure annulatis; thorace relative parvo, tuberibus dorsalibus valde elevatis, lateralibus apice acutis; elytris postice parcissime punctulatis, versus basin crebre asperatis, costis passim valde nigro fasciculatis; tarsis griseis.

Long. 12 lin. ♀.

Hab. Costa Rica, Volcan de Irazu (*Rogers*).

6. **Lagochirus funestus.**

Lagocheirus funestus, Thomson, Syst. Céramb. p. 545[1].

Hab. Mexico [1], Etla, Puebla (*Sallé*).

A fine species, as large as *L. rogersi*, but distinguished from it by the complete absence of tufts of hairs from the elytra. The costæ of the elytra also are deficient, except at the extreme base, the rest of the surface being thickly sprinked with round black spots margined with grey. The lateral tubercles of the thorax are remarkable in both sexes in being terminated by a long sharp point. In a female example in M. Sallé's collection the usual lateral black spot is nearly obsolete.

7. **Lagochirus cristulatus.** (Tab. XI. fig. 10.)

Lagocheirus cristulatus, Bates, Trans. Ent. Soc. 1872, p. 209.

Hab. Nicaragua, Chontales (*Belt*).

8. **Lagochirus rosaceus.** (Tab. XI. fig. 12.)

Lagocheirus rosaceus, Bates, Trans. Ent. Soc. 1869, p. 386[1].

Hab. Nicaragua, Chontales (*Belt*[1], *Janson*).

9. **Lagochirus præcellens.** (Tab. XI. fig. 13.)

Lagocheirus præcellens, Bates, Trans. Ent. Soc. 1872, p. 209[1].

Hab. Nicaragua, Chontales (*Belt*[1], *Janson*).

10. **Lagochirus simplicicornis.** (Tab. XI. fig. 14.)

Lagocheirus simplicicornis, Bates, Trans. Ent. Soc. 1872, p. 210.

Hab. Nicaragua, Chontales (*Belt*).

LEPTOSTYLUS.

Leptostylus, Leconte, Journ. Acad. Phil. ser. 2, ii. p. 168 (1852); Lacordaire, Gen. Col. ix. p. 771; Horn, Trans. Am. Ent. Soc. viii. (1880), p. 119.

This tolerably well-defined genus of small Lamiadæ, allied to *Lagochirus* and *Leiopus*, is also restricted to America. About fifty species are known; thirteen of which are

recorded from North America and a small number from the West Indies. None have yet been described from temperate latitudes in South America or even from South Brazil, whilst Central America is rich in species. Mexico and the adjoining regions may be considered, therefore, as in the case of *Lagochirus*, the headquarters of the genus. I suspect *Erphæa* of Erichson (Wiegm. Arch. 1847, i. p. 144) to be synonymous with *Leptostylus*, or at least to include the species with prominent mesosternum; but no author seems to have recognized the genus since it was described, and I have not seen the species on which it is founded.

1. **Leptostylus viriditinctus.** (Tab. XI. fig. 16.)

Leptostylus viriditinctus, Bates, Trans. Ent. Soc. 1872, p. 210 [1].

Hab. Nicaragua, Chontales (*Belt* [1], *Janson*).

2. **Leptostylus metallicus.**

L. viriditincto similis, sed differt elytrorum carinis prope basin valde elevatis et arcuatis sic ut in gen. *Steirastoma*.

Breviter ovatus, fuscus, thorace lateribus elytrisque fere totis aurato-viridibus sericeo-nitentibus; oculis parvis; antennis fuscis, articulis 3° et 4° medio cinereo-annulatis, scapo basi gracili gradatim dilatato, infra vix planato, apice paullulum producto; thorace parvo, medio punctato tuberculis lateralibus distinctis, conicis, dorsalibus quinque elevatis; elytris sic ut in *L. viriditincto*, apice angustatis, sinuato-truncatis, angulis (præcipue exteriore) productis, dorso utrinque bicostatis plurifasciculatis, costa interiore valde arcuata et elevata; corpore subtus nigro-nitido, lateribus fulvo-tomentosis; prosterno latissimo convexo, mesosterno antice concavo; femoribus minus incrassatis, posticis apice extus dentatis.

Long. 6 lin.

Hab. Costa Rica (*Dr. Horn*).

3. **Leptostylus hilaris.** (Tab. XI. fig. 17.)

Leptostylus hilaris, Bates, Trans. Ent. Soc. 1872, p. 211 [1].

Hab. Nicaragua, Chontales (*Belt* [1], *Janson*).

4. **Leptostylus subfurcatus.** (Tab. XI. fig. 8.)

L. hilari proxime affinis, postice magis attenuatus: griseus viridi tinctus, elytris macula laterali mediana (a margine distante), fascia recta maculari posteriore maculaque marginali ante apicem nigro-fuscis, notulis dorsalibus basin versus, altera subsuturali prope apicem fulvis; thorace tuberculo laterali haud prominulo; antennis cinereis fusco guttatis; elytris juxta apicem attenuatis, apice breviter sinuato-truncatis, angulis exterioribus divaricatis, dorso multifasciculato, carina centro-basali elevata, tota basi grosse punctata.

Long. 5–6 lin.

Hab. Nicaragua, Chontales (*Belt*).

Differs from *L. hilaris* by the grey, not hoary-white, colour of the light parts of its upper surface and the silky-green tinge in places, also by the less distinct lateral tubercles of the thorax and the more produced apices of the elytra. A distinguishing character is also furnished by the position of the dark median spot on the elytra, which does not reach the margin.

5. **Leptostylus pulcherrimus.**

L. hilari affinis at gracilior: supra albo-ochraceus, elytris basi rufescenti-fuscis macula laterali mediana, altera anteapicali, macula triangulari suturali (altera utrinque a sutura remota paullo anteriore) fasciaque retrorsum obliqua post medium nigris; thorace tuberculis omnibus obtusissimis, maculis postico-marginalibus quatuor nigris; elytris postice gradatim angustatis, apice obtuse oblique truncatis fere rotundatis, dorso plurifasciculato, ob tomentum densum haud conspicue punctato; antennis ochraceo-albis, articulis apice nigris, 3° et 4° autem nigro guttatis; pedibus ochraceis, femoribus basi rufis, tibiis nigro biannulatis, tarsis nigris, femoribus subtus corporeque nigris griseo-maculatis; prosterno angusto, mesosterno inter coxas constricto.

Long. 5 lin.

Hab. MEXICO, Cordova (*Sallé*).

One example of this ornate and very distinct species in M. Sallé's collection.

6. **Leptostylus leucanthes.**

L. hilari affinis, magis elongatus: supra griseo-fuscus, elytris macula magna medio-laterali, altera minore longe ante apicem, margine exteriore fere toto maculaque transversa prope suturam nigro-fuscis, fascia lata post medium cinereo-alba; thorace tuberculis lateralibus prominulis; elytris plurifasciculatis, apice angustatis et paullo oblique obtuse truncatis; antennis albo-griseis, articulis apice nigris, 1° et 3°–5^{m} nigro guttatis; corpore subtus pedibusque atro-fuscis, griseo piperitis, femorum clavis annulisque duobus tibiarum canis.

Long. $4\frac{3}{4}$–$5\frac{1}{2}$ lin.

Hab. MEXICO, Juquila (*Sallé*).

Differs from *L. hilaris* in being rather more slender and elongate in form, and in the elytra being ashy brown for a large space at the base and apex, and white in an ill-defined fascia a little behind the middle. The median lateral spot is also larger and united to the subapical marginal spot, which latter is different in position from the analogous spot in *L. hilaris*, being in a transverse line with short postmedian black fascia. In one of M. Sallé's two specimens there is an additional curved black mark on each elytron near the suture behind the middle (as in *L. hilaris*), which is absent in the second specimen.

7. **Leptostylus spiculatus.**

Quoad formam *L. hilari* similis, sed aliter coloratus: ovatus, postice declivis, elytrisque apice paullo productis singulatim sinuato-truncatis; obscure fuscus, thorace tuberculis quinque dorsalibus validis, elytris tuberculis spiniformibus passim asperatis, posterioribus singulis antice cinereo guttatis; antennis pedibusque rufescenti-fuscis fusco maculatis.

Long. 5 lin.

Hab. NICARAGUA (*Sallé*).

8. **Leptostylus viridescen**

Angustus, convexus, viridi-cinereus sericeo micans, elytris post medium fasciola angusta undulata lituraque suturali prope apicem albis; thorace parvo, lateribus vix tumido, tuberculis dorsalibus quinque validis;

elytris postice declivibus, apice angustatis et breviter truncatis, dorso seriatim fasciculato-tuberculatis, apice lævibus, lateribus unicostatis.

Long. $3\frac{1}{2}$ lin.

Hab. NICARAGUA (*Sallé*).

9. **Leptostylus lazulinus.**

L. hilari affinis at minor, aliter coloratus elytrisque setosis vix fasciculatis: convexus, griseo-fuscus, viridescens, subsericeo micans, elytris apice singulis plagis tribus læte griseo-viridibus; thorace 5-tuberculato, lateribus medio tumidis; elytris postice gradatim declivibus, apice paullo productis sed obtusis, prope basin inæqualibus, singulis costa discoidali, altera marginali, tuberculisque setiferis sublineatim digestis.

Long. $4\frac{1}{4}$ lin.

Hab. MEXICO, Cordova (*Sallé*).

10. **Leptostylus cineraceus.** (Tab. XI. fig. 19).

Leptostylus cineraceus, Bates, Trans. Ent. Soc. 1874, p. 230 [1].

Hab. NICARAGUA, Chontales (*Belt* [1]).

11. **Leptostylus decipiens.**

Leptostylus transversus, Bates, Trans. Ent. Soc. 1872, p. 211 [1] (nec Gyllenhal).

L. transverso simillimus, at differt elytris post medium haud transverse cristatis: fuscus, supra (ut in *L. transverso*) plus minusve canescens, thorace lateribus (sub tuberculo) elytrisque macula laterali elongata a basi usque ultra medium extensa et guttulis duabus ante apicem nigro-fuscis; thorace medio prominulo, lateribus postice paullo sinuatis, dorso quinquetuberculato; elytris apice oblique sinuato-truncatis, dorso fasciculis parvis utrinque in series quinque ordinatis omnibus discretis, declivitate posteriore vix obscuriore; mesosterno angustulo, medio concavo.

Long. $4\frac{1}{2}$ lin.

Hab. NICARAGUA, Chontales (*Belt* [1]).

12. **Leptostylus xanthopygus.**

L. transverso affinis: fusco-cinereus, elytris postice fulvescentibus ante apicem callo transverso obtuso; thorace sic ut in *L. transverso* tuberculato; elytris postice citius et obtusius rotundatis, apice haud truncatis, dorso penicillis parvis in lineas digestis, prope basin magis elevatis spatioque lævi antico-discoidali subdepresso; supra declivitatem posteriorem (prope suturam) utrinque cristis brevibus duabus elevatis, interstitiis usque ad apicem crebre punctulatis; antennis rufescenti-cinereis, fusco-maculatis.

Long. $3\frac{1}{2}$–4 lin.

Hab. NICARAGUA, Chontales (*Belt*).

Distinguished from *L. transversus* and its allies by the obtusely rounded apices of the elytra, by the smoother surface, the absence of medio-lateral dark spot, and the silky-tawny hue of the posterior declivity, at the commencement of which there are two short transverse ridges, one behind the other and near the suture.

13. **Leptostylus notaticollis.**

L. transverso affinis at minor: ochraceo-fuscus, thorace angulis posticis nigro maculatis guttulaque marginali utrinque prope angulum; elytris medio dorso depressis, postea iterum convexis, dorso penicillis rigidis et

tuberculis asperatis, versus apicem modice attenuatis, apice vix truncatis, pone medium fascia paullo obliqua cinerea; antennis rufescenti-fuscis, cinereo maculatis, articuli quinti dimidio basali cinereo; thorace sic ut in *L. transverso*, sed tuberculis duobus antico-dorsalibus solum elevatis.

Long. 3 lin.

Hab. NICARAGUA, Chontales (*Belt*).

14. **Leptostylus hispidulus.**

Leptostylus hispidulus, Bates, Trans. Ent. Soc. 1874, p. 229[1].

Hab. NICARAGUA, Chontales (*Belt*[1]).

15. **Leptostylus macrostigma.**

Leptostylus macrostigma, Bates, Trans. Ent. Soc. 1872, p. 212.

Hab. NICARAGUA, Chontales (*Belt*).

16. **Leptostylus gibbulosus.**

Leptostylus gibbulosus, Bates, Trans. Ent. Soc. 1874, p. 230, nota[1].

Hab. NICARAGUA, Chontales (*Janson*).—SOUTH AMERICA, Venezuela[1].

17. **Leptostylus lævicauda.**

L. oblongo-ovatus, cinereo-fuscus, elytris cinereis macula mediano-laterali magna atro-fusca, declivitate posteriore sericeo-fusca lævi, hoc colore angulum acutum antice ad suturam formante; thorace tuberibus dorsalibus vix elevatis, lateralibus fere obsoletis; elytris postice modice angustatis, apice oblique et obtuse truncatis, dorso penicillis prope basin altis acutis, cæteris parvis; epipleuris fere verticalibus carinulaque delimitatis; antennis carneo-griseis, articulis apice fuscis, 1°–6ᵐ fusco guttatis; pedibus cinereo-hirsutis, tibiis apice tarsisque nigris.

Long. 4 lin.

Hab. GUATEMALA, Zapote (*Champion*).

This species recedes a little from the numerous group of which *L. transversus* is the type, in the weaker development of the thoracic tubercles and the less hispid surface of the elytra. In the latter the apical declivity is smooth and silky, the colour being limited anteriorly very obliquely, extending in an acute angle up the suture.

18. **Leptostylus obliquatus.**

L. oblongo-ovatus, cinereo-fuscus, elytris fascia angusta postica valde obliqua cinerea maculaque mediano-laterali fusca; thorace tuberibus dorsalibus duobus anterioribus elevatis, cæteris minus distinctis, lateralibus prominulis et postea margine sinuato-angustato; elytris minus inæqualibus, parum convexis, prope apicem modice angustatis, apice fere rotundatis, dorso penicillis parvis vix hispidis, punctulatis; epipleuris subverticalibus; antennis griseis, articulis apice anguste fuscis, 3° et 4° fusco guttatis; sternis sic ut in *L. transverso* latis.

Long. $3\frac{1}{2}$–4 lin.

Hab. MEXICO, Oaxaca (*Boucard?*), Juquila (*Sallé*).

A species closely allied to *L. lævicauda*, both being members of a small group which differ from *L. transversus* in the much smoother and more even surface both of thorax

and elytra; the nearly vertical epipleuræ are in both bounded by an indistinct carina. The more prominent and acute lateral tubercle of the thorax and the more obtuse apices of the elytra are the only structural points of difference between *L. obliquatus* and *L. lævicauda.*

19. **Leptostylus triangulifer.** (Tab. XI. fig. 20.)

Leptostylus triangulifer, Bates, Trans. Ent. Soc. 1872, p. 211.

Hab. NICARAGUA, Chontales (*Belt*).

20. **Leptostylus pygialis.**

Leptostylus pygialis, Bates, Trans. Ent. Soc. 1872, p. 212.

Hab. NICARAGUA, Chontales (*Belt*).

21. **Leptostylus cristulatus.**

Leptostylus cristulatus, Bates, Trans. Ent. Soc. 1872, p. 213.

Hab. NICARAGUA, Chontales (*Belt*).

22. **Leptostylus leucopygus.**

Leptostylus leucopygus, Bates, Trans. Ent. Soc. 1872, p. 212.

Hab. NICARAGUA, Chontales (*Belt*).

23. **Leptostylus orbiculus.**

L. leucopygo simillimus, sed brevior, magis orbicularis, oculis parvis scapoque longiore et graciliore : brevissime ovatus, fuligineo-fuscus, elytris apice late griseis; fronte verticali fere plana, oculis parvis; thorace parvo, antice gradatim angustato, tuberculis lateralibus nullis, dorsalibus tribus, maculis tribus fulvis in triangulum prope scutellum dispositis; elytris præcipue postice convexis, lateribus ante apicem sinuatis, supra punctato-striatis, interstitiis alternis seriatim parce fasciculatis, fasciculo centro-basali elevato; antennis fuscis, articulis 3°–11^{m} basi (5° toto) griseis, scapo articuloque tertio curvatis, illo gracili valde elongato; tibiis medio, tarsis articulis 3° et 4° pallidis.

Long. 2 lin.

Hab. MEXICO, Cordova (*Sallé*); NICARAGUA, Chontales (*Belt*).

The lower lobe of the eyes is smaller and much more finely granulated in this little species than in *L. leucopygus*; and the antennal scape is distinctly longer, reaching the hind margin of the thorax; on the other hand it recedes less than that species from the typical forms of the genus in the sternal structure, the prosternum being distinctly broader and nearly as broad as the mesosternum, the contrary being the case in *L. leucopygus.* In another member of this group of small ovate species, viz. *L. ovalis*, the pro- and mesosterna are as large relatively as in *L. transversus*; it would be difficult therefore to find definite generic characters by which to separate the group from *Leptostylus*, notwithstanding their differences of general form.

24. **Leptostylus pilula.**

L. orbiculo proxime affinis, at differt præter colores pro- et mesosternis angustis: breviter ovatus, supra fusco-rufescens, thorace vittis duabus elytrisque fascia recta postmediana (apud latera valde dilatata) et litura angulata ante apicem nigris; fronte verticali fere plana, oculis parvis; thorace parvo, antice gradatim angustato, tuberculis lateralibus nullis, dorsalibus tribus; scutello nigro; elytris brevibus, convexis, ante apicem marginibus sinuatis, supra punctato-striatis, interstitiis alternis elevatis, haud fasciculatis, sed tuberculis centro-basalibus utrinque duobus apice hirsutis; antennis articulis 1°–3m rufis, 4°, 6°, 7°, 9°, et 11° nigro-fuscis, 5°, 8°, et 10° testaceo-albis; corpore subtus ochraceo; pedibus pallide rufescentibus; tibiis apice tarsisque basi fuscis.

Long. $2\frac{1}{4}$ lin.

Hab. Costa Rica (*coll. Bates*).

25. **Leptostylus cretatellus.**

Leptostylus cretatellus, Bates, Ann. & Mag. Nat. Hist. 1863, ser. 3, xii. p. 102[1]; Trans. Ent. Soc. 1872, p. 236[2].

Hab. Nicaragua, Chontales (*Belt*[2]).—South America, Amazons[1].

At first sight resembles *L. transversus* and allied species, but of rather more elongate form, and well distinguished by the prominent conical side-tubercles of the thorax.

26. **Leptostylus palliatus.**

Leptostylus palliatus, Bates, Trans. Ent. Soc. 1874, p. 229[1].

Hab. Nicaragua, Chontales (*Belt*[1]).

The tubercles of the disk of the thorax being obsolete in this species, it scarcely comes within the definition of *Leptostylus*. It seems, however, better placed here than in *Nyssodrys*, to which it would otherwise have to be referred, the elytra being furnished with rows of setæ for the most part clustered in fasciculi, as in the typical *Leptostyli*.

27. **Leptostylus corpulentus.**

Robustus, oblongo-ovatus, sed modice convexus, fuscus, tomento tenuissimo integumento subnudo; supra totus conspicue punctatus; thorace valde transverso, lateribus tumido, dorso obtusissime trituberculato, plaga utrinque ochracea; elytris haud setosis, sed tuberculis obtusissimis lineatim digestis, apice singulis angustatis et oblique truncatis; antennis pedibusque rufescenti-fuscis vix fusco-maculatis; mesosterno latissimo, plano.

Long. $5\frac{1}{2}$ lin.

Hab. Nicaragua, Chontales (*Belt*).

28. **Leptostylus trigonus.**

Parvus, subovatus, postice gradatim angustatus, modice convexus, griseo-fuscus, elytris utrinque plaga elongata (intus rotundata) laterali fasciculisque obscurius fuscis; thorace antice angustato, dorso septemtuberculato, lateribus paulo ante basin tumidis; elytris dorso (post scutellum) planatis lateribusque prope basin costatis, epipleuris verticalibus, apice breviter oblique truncatis, supra fasciculis parvis crassis lineatim ordinatis.

Long $2\frac{1}{2}$ lin.

Hab. Guatemala, Zapote (*Champion*).

TRICHALPHUS.

Alpho et *Leptostylo* necnon *Ecyro* affinis; differt corpore toto longe hirsuto, thoraceque lateribus haud armato. Corpus parvum, oblongum, subcylindricum. Caput parvum, inter antennas valde depressum; oculi magni, grosse granulati. Antennæ filiformes, longe hirsutæ; scapo ut in *Leptostylo* elongato sed paullo magis clavato, subtus minus flexuoso, apice nihilominus acute producto; articulis 3° et 4° æqualibus scapo vix longioribus, 5°–11^{m} gradatim decrescentibus. Thorax vix transversus, dorso obtuse multituberculatus, lateribus paulo ante basin obtuse tumidis. Elytra apice rotundata, dorso æqualiter convexa, pluricostulata et seriatim setosa, cristis centro-basalibus plurifasciculatis. Pedes breves; femora valde clavata; tarsi posteriores breves, articulo primo quam cæteri singuli vix longiore. Acetabula antica extus nullomodo angulata. Pro- et mesosternum inter pedes lata.

The species for which this new genus is instituted has very little general resemblance to the rest of the Acanthocinini, its oblong, subcylindrical form and long pubescence being unusual features in this group. The length and form of the antennal scape and the perfectly closed exterior suture of the anterior haunch-sockets, however, leave us in no doubt as to its position. On account of its short posterior legs and hind tarsi I place it near *Leptostylus*; but it would probably be better ranged in the vicinity of *Ecyrus* and *Alphus*.

1. **Trichalphus pilosus.**

Rufescenti-fuscus, pilis longis griseis (præcipue in pedibus) vestitus, thorace medio lineis, elytrisque plaga magna humerali fasciculisque, nigro-fuscis; antennis pedibusque rufescenti-fusco atro-fuscoque variegatis.

Long. 4 lin.

Hab. GUATEMALA, San Gerónimo (*Champion*).

ALPHINELLUS.

Corpus minutum, oblongum, convexum. Caput inter antennas valde concavum. Antennæ filiformes, corpore vix longiores, nec ciliatæ, scapo abbreviato, mox a basi gradatim dilatato, infra leviter flexuoso, apice subacuto; articulo tertio quam scapum duplo longiore, quarto paullo breviore, cæteribus brevibus. Thorax subquadratus, dorso antico valde gibboso, lateribus paullo ante basin acute spinosis vel obtuse prominentibus. Elytra subcylindrica, postice abrupte declivia, apice juxta suturam brevissime truncata, dorso utrinque carinulis tribus lineatim digestis et versus latera bicostulata. Pedes breves; femora clavata; tarsi posteriores articulo primo brevi, triangulari. Prosternum inter pedes angustum, coxis globosis, exsertis; acetabula extus clausa.

Three extremely small species at present constitute this very distinct genus, which resembles *Leiopus* and *Lepturges* in the form of the prosternum and anterior coxæ, but differs wholly from them in its convex oblong body, with gibbous thorax and elytra marked with short elevated lines arranged in rows. The thoracic lateral spines existing in two of the species are similar to those of the genus *Dectes*; but in a third species, very similar to the other two, these spines are absent. The form of the scape is unlike that of any other genus of Acanthocinini, approaching nearest that of *Alphus*.

1. **Alphinellus gibbicollis.**

Atro-fuscus, subtiliter squamoso-tomentosus absque setis pilisque, passim crebre punctatus, thorace lateribus, elytris dimidio posteriore humerisque cinereis; antennis rufescentibus, articulis 3°–11^{m} apice fuscis; tibiis

basi rufescentibus, apice et tarsis nigris ; elytris tuberculis elongatis tribus, primo centrali basali, secundo mediano, tertio supra declivitatem posteriorem, lineisque elevatis submarginalibus interruptis basin versus obsoletis.

Long. 2 lin.

Hab. GUATEMALA, Capetillo (*Champion*).

2. **Alphinellus minimus.**

Minor et minus convexus, rufescenti-cinereus, crebre punctatus, thorace disco elytrisque maculis in fascias tres digestis (prima basali, secunda mediana tertiaque supra declivitatem posteriorem) et macula magna laterali fuscis ; antennis pedibusque pallide rufo-testaceis, fusco maculatis ; thorace latiore, transverso, antice gibboso, spina laterali multo breviore sed acuta ; elytris tuberculis elongatis tribus, primo centro-basali magis elevato cariniformi, lineis elevatis utrinque submarginalibus vix elevatis.

Long. 1 lin.

Hab. GUATEMALA, Zapote (*Champion*).

3. **Alphinellus subcornutus.**

Rufescenti-fuscus, plagis nonnullis obscurioribus, antennis rufo-testaceis, articulis 3° et 4° apice, 6°–11^{m} totis nigro-fuscis, tibiis apice nigris ; tuberibus antenniferis intus conice elevatis subcornutis ; thorace antice valde gibboso trituberoso, basi constricta et depressa, lateribus ante basin obtuse prominulis haud spinosis ; elytris carinula centro-basali, altera simili anteapicali tertiaque minore mediana, lateribus utrinque lineis duabus elevatis.

Long. 1½ lin.

Hab. GUATEMALA, Teleman (*Champion*).

ELEOTHINUS.

Leptostylo et *Leiopo* affinis. Corpus elongato-ovatum, modice convexum, supra inæquale, fasciculatum, interdum hirsutum. Caput inter antennas concavum, fronte verticali, infra oculos sat prolongatum. Antennæ corpore fere duplo longiores, setaceæ, sparsissime setosæ ; scapus capite cum thorace longior, subtus subplanatus, vix flexuosus ; articuli 3^{us}–11^{m} subæquales. Thorax fere ut in genere *Œdopeza*, convexo, disco antice bituberculato basi depresso, lateribus ante basin breviter spinosis, a spina usque ad marginem anteriorem subrotundatim angustato. Elytra elongato-ovata, postice attenuata, apice oblique sinuato-truncata, angulo exteriore producto, disco subcostata, pluripenicillata. Pedes modice elongati ; femora clavata ; tarsi postici breves, articulo primo duobus sequentibus æquali. Prosternum sat latum ; mesosternum latum, postice angustatum. Segmentum apicale ventrale (♂?) late emarginato-truncatum, dorsale late obtusum.

This new genus is founded for the reception of three species from Guatemala which partake of the characters of both *Leptostylus* and *Leiopus*, and cannot be included in either without rendering their definition impossible. They have the broad pro- and mesosterna, the cristulated upper surface of the body, and short hind tarsi of *Leptostylus*, with the general form, and particularly of the thorax, of *Leiopus*. In general form and in the shape of the apices of the elytra one of the species much resembles *Leptostylus præmorsus* of the West Indies, though much smaller.

1. **Eleothinus abstrusus.**

Fulvescenti-fuscus, elytris dimidio basali obscuriore, thorace vitta abbreviata dorsali, altera utrinque obliqua, scutello penicillisque elytrorum nigris ; elytris disco posteriore tricostulatis, costulis ante apicem con-

junctis, penicillo centro-basali, alteris duobus postmedianis (fasciam obliquam simulantibus) solum elevatis, cæteris parvis; antennis cinereis fusco sparsis, articulis apice fuscis; pedibus fusco annulatis.

Long. 3 lin.

Hab. GUATEMALA, Capetillo (*Champion*).

2. **Eleothinus longulus.**

Angustulus, postice gradatim longe attenuatus, fusco-griseus; antennis pallide testaceis griseo maculatis, articulis a tertio apice atro-fuscis, scapo quam thorax breviore, infra planato; thorace sat parvo, antice recte angustato, spina laterali brevissima, deinde lateribus sinuato-angustatis; scutello basi atro-fusco; elytris apice valde oblique recte truncatis, dorso obtuse pluricostatis, penicillis vix elevatis et macula magna ante medium laterali atro-fuscis.

Long. 3 lin.

Hab. GUATEMALA, Dueñas (*Champion*).

In structural characters this species does not differ essentially from *Leptostylus præmorsus* from Guadaloupe, which with its allies, differing from the typical forms of *Leptostylus* in the lateral armature of the thorax approaching that of *Leipus*, might very well be referred to *Eleothinus*. The small tufts of black hair on the elytra resemble the dark spots of certain *Leiopi*, especially *L. variegatus* (Haldeman), which differs from other *Leiopi* in the width of the mesosternum, and in that respect approaches *Eleothinus*.

3. **Eleothinus comus.**

Elongato-ovatus, fulvo-testaceus, capite, thorace medio elytrisque plaga magna communi mediana postice oblique definita atro-fuscis; antennis fuscis, articulis basi et annulo mediano flavo-testaceis; thorace spina valida laterali sat ante basin, antice subrecte angustato, pone spinam profunde sinuatim angustato, dorso inæquali grosse sparsim punctato, basi transverse depresso; elytris oblique truncatis, dorso crebre punctatis, nigro-penicillatis et setis longissimis obsitis epipleuris verticalibus; tibiis et tarsis fusco annulatis.

Long. $3\frac{1}{2}$ lin.

Hab. GUATEMALA, San Gerónimo (*Champion*).

The large sooty-black patch of the elytra is very ill defined (and paler) towards the base, but sharply limited posteriorly, where its border forms a blackish line obliquely directed posteriorly from the epipleura to the suture, leaving a large apical area of the same yellowish-ashy colour as the underside of the body.

MECOTETARTUS.

Mecotetartus, Bates, Trans. Ent. Soc. 1872, p. 213; Horn, Trans. Amer. Ent. Soc. viii. pp. 118, 126 (1880).

Eutessus, Leconte, Smithson. Miscell. Coll. No. 265, pt. ii. (1873), p. 339.

The following is the only species of this remarkable genus of Acanthocinini at present known:—

1. **Mecotetartus antennatus.** (Tab. XII. fig. 14, ♂.)

Mecotetartus antennatus, Bates, Trans. Ent. Soc. 1872, p. 213 [1].
Eutessus asper, Leconte, Smithson. Miscell. Coll. No. 264, part ii. (1873), p. 236 [2].

Hab. NORTH AMERICA, Lower California [2].—NICARAGUA, Chontales (*Belt* [1]).

ALCIDION.

Alcidion, Thomson, Classif. Longic. p. 12 (1860); Bates, Ann. & Mag. Nat. Hist. ser. 3, xii. p. 105 (1863).

In its more typical species, viz. those which are conformable to *A. latum* (Thomson's type), this is a well-marked genus, distinguished by its trigonal form of body, unarmed thorax, and by the high centro-basal ridges and the lateral and dorsal carinæ of the elytra. Many of the less typical species, however, degenerate in one or more of these features. Nearly thirty species are known, all Tropical-American.

1. **Alcidion latum.**

Alcidion latum, Thomson, Classif. Long. p. 12.

Hab. MEXICO, Cordova (*Sallé*).

2. **Alcidion eulophum.** (Tab. XIV. fig. 3.)

Elongatum, thorace parvo fere cylindrico, elytris versus apicem angustatis valde oblique sinuato-truncatis angulo exteriore elongato. Fuscum; elytris guttulis nigris lineatim seriatis, fasciaque pone medium M-formi fulva postice fusco-marginata et venis pallidis usque ad apicem, humeris haud productis, carina laterali acuta, dorsali obsoleta, carina brevi alta centro-basali; antennarum scapo subtus valde flexuoso, breviter dense ciliato, apice haud incrassato; tibiis anticis intus bisinuatis.
Long. $3\frac{1}{4}$–5 lin.

Hab. MEXICO, Cordova, Chiapas (*Sallé*); BRITISH HONDURAS, river Sarstoon (*Blancaneaux*); GUATEMALA, Capetillo, Cerro Zunil, Chiacam et Senahu (*Champion*).

3. **Alcidion furciferum.**

A. eulopho proxime affine sed multo brevius, elytris subtrigonis, mox ante apicem sat valde angustatis, absque venis pallidis, apice oblique sinuato-truncatis, angulo exteriore longe producto, thorace disco distinctius bituberculato, lateribus medio tumidis subtuberculatis; fusco-griseum, tuberculis duobus thoracis guttisque elytrorum seriatim ordinatis nigris; elytris post medium fascia M-formi grisea postice nigro-marginata maculaque paullo posteriore prope suturam nigra; tibiis anticis intus bisinuatis.
Long. $3\frac{1}{2}$ lin.

Hab. GUATEMALA, Totonicapam (*Champion*).

Although very closely allied to *A. eulophum*, and having a similar high, sharply-compressed centro-basal carina, this species offers a very different facies, due to the much shorter and more triangular form of the elytra and the absence of the characteristic pale vein-like markings which in *A. eulophum* are seen between the M-formed

fascia and the apex. From *A. brachiale*, which it resembles in size, shape, and markings, it is at once distinguishable by the greatly prolonged outer angle of the apex of the elytra.

4. **Alcidion scutellatum.**

A. eulopho affine, paullo magis couvexum elytrisque lateribus magis rotundatis etc., elongato-ovatum, cinereo-fuscum, elytris utrinque plaga magna laterali sat ante apicem atro-fusca, antice litura angulata, intus (suturam versus) lineola, aterrimis marginata; antennis rufo-testaceis, articulis omnibus apice nigris, scapo subtus valde flexuoso; thorace lateribus medio paullo tumidis, disco nigro bituberculato; scutello nigro, linea mediana pallida; elytris apice oblique sinuato-truncatis, angulo exteriore producto, tuberculo compresso, fere conico, centro-basali, costulis dorsalibus et carina laterali obtusis nigro-guttatis; tibiis anticis intus bisinuatis.

Long. 4 lin.

Hab. Guatemala, Cerro Zunil (*Champion*).

5. **Alcidion privatum.** (*Lophopœum privatum*, Tab. XII. fig. 10.)

Alcidion privatum, Pascoe, Trans. Ent. Soc. ser. 3, vol. v. p. 236[2]; Bates, ibid. 1872, p. 236[1].

Hab. Guatemala, San Gerónimo, Dueñas (*Champion*); Nicaragua, Chontales (*Belt*[1]). —South America, Colombia, Santa Martha[2].

6. **Alcidion brachiale.** (Tab. XII. fig. 13.)

Alcidion brachiale, Bates, Trans. Ent. Soc. 1873, p. 214[1].

Hab. Mexico, Cordova (*Sallé*); Guatemala, Sabo (*Champion*); Nicaragua, Chontales (*Belt*[1]).

7. **Alcidion adjunctum.**

Alcidion adjunctum, Thomson, Syst. Ceramb. p. 544.

Hab. Costa Rica.

HEXACONA.

Corpus elongatum, subtrigonum, vix convexum. Caput antice latum; oculi parvi, distantes; frons planata, verticalis. Antennæ corpore paullo longiores, setaceæ, brevissime setosæ, scapo robusto et elongato, valde flexuoso fere difformi, apice subtus valde producto; articulo tertio quam scapum paullo longiore. Thorax transversus, tuberculis magnis quatuor conico-compressis: viz. duobus lateralibus, duobus discoidalibus. Elytra elongato-trigona, tuberculo utrinque centro-basali valido conico, carina obsoleta dorsali. Pro- et mesosternum lata. Femora valde clavata; tarsi postici articulo primo quam duo sequentes conjuncti dimidio longiore.

This genus forms part of a small group, which are allied to *Alcidion*, but are distinguished by the thorax being armed with medio-lateral spines or tubercles. To the group belong the genera *Tithonus*, *Belæsthes*, *Cleodoxus*, *Lathræus*, *Lophopœum*, &c., most of which consist at present of one species only. In *Hexacona* these tubercles are as largely developed and as conical as in many of the Acanthoderini, and are accom-

panied by two dorsal tubercles of the same size and form, and two elytral tubercles (in the position of the centro-basal ridges or crests) also similar in size but less compressed laterally.

1. **Hexacona armata.** (Tab. XII. fig. 15.)

Purpurascenti-fusca, subsericeo-nitens, elytris guttulis et plagis lateralibus (quarum mediana majore versus suturam fasciatim extensa) saturatius fuscis; antennarum articulis basi pallidis; corpore subtus pedibusque sericatis, his subrufescentibus, tibiis testaceo annulatis, tarsis articulo primo griseo; elytris punctatis, prope apicem angustatis, apice oblique sinuato-truncatis, angulo suturali recto, exteriore valde producto.
Long. 8 lin.

Hab. COSTA RICA, Rio Sucio (*Rogers*).

CATHARESTHES.

Corpus sicut in *Acanthodere* robustum, oblongo-ovatum. Caput antice verticale, sat elongatum, subplanum. Antennæ (♂) corpore dimidio longiores, haud ciliatæ, scapo elongato, subtus paullo flexuoso, apice simplici; articulo tertio quam scapum paullo longiore. Thorax modice transversus, tuberculo laterali valido conico, alteris duobus discoidalibus magnis obtusis vix elevatis. Elytra subtrigona, apud basin thorace fere duplo latiora, absque carinis, tuberculo centro-basali grosso parum elevato, apice sinuatim truncata utrinque bidentata, supra passim discrete punctata, versus basin sat grosse tuberculata. Pedes robusti, sat elongati; femora grosse clavata, posteriora elongata et longe pedunculata; tarsi postici articulo primo quam duo sequentes paulo longiore. Prosternum modice angustum; mesosternum latum quadratum. Abdominis (♂) segmento apicali elongato subconico, pygidio profunde emarginato fere bispinoso, segmento ventrali leviter sinuato.

This genus belongs to the same group as the preceding; but its robust form gives it a totally different facies from that prevalent among the Acanthocinini, and it would readily be mistaken for an *Acanthoderes*; the closed outer suture of the anterior acetabula, and the length and shape of the antennal scape, however, leave us in no doubt as to its true affinities.

1. **Catharesthes elegans.**

Fuscus, brevissime setosus, vertice et thorace atro-fusco maculatis, elytrorumque punctis omnibus atro-fusco marginatis; elytris fascia angusta paullo irregulari pone medium liturisque juxta apicem albo-cinereis; antennis articulis basi, tibiis annulo lato tarsisque articulo primo griseis.
Long. $6\frac{1}{4}$ lin. ♂.

Hab. GUATEMALA, Purula (*Champion*).

The dark brown rounded spots, which are sprinkled over the upper surface, cover the numerous punctures of the elytra and others which exist also on the hind part of the thorax; but there are similar spots without punctures on the occiput and thorax, viz. two on the former and two each on the discoidal tubercles of the latter. The tubercular granulations of the elytra, which are strongly marked near the base and accompany the punctures nearly to the apex, are also dark brown.

LOPHOPŒUM.

Lophopœum, Bates, Ann. & Mag. Nat. Hist. ser. 3, xii. p. 275 (1863).

The typical species of this genus resemble the *Leiopi* and the shorter species of *Alcidion*, having similar capilliform, slender antennæ, and oblong or subtrigonal, moderately convex form of body, free from inequalities and fasciculated setæ: from both they are distinguished by the acute median lateral tubercles of the thorax. The elytra have short centro-basal elevations or ridges, sometimes surmounted by a pencil of hairs; and the epipleuræ, although vertical towards the base, have not carinate edges. The antennal scape is as long as, or longer than, the third joint, and is very slightly flexuous beneath; the pro- and mesosterna are moderately narrow; and the hind tarsi have a short basal joint, as in *Alcidion*. Unfortunately it is impossible to fix definite limits between these normal species and others, such as *L. barbiscapum* and *L. cultriferum*, which depart widely from the types in facies and in many structural details. The species just mentioned are of much larger size and more robust form, with antennal scape strongly flexuous beneath and elytra more or less roughened with tubercles or hispid with fasciculated tufts of hair—*L. cultriferum* agreeing with the typical species in the capilliform and nearly naked antennæ, whilst *L. barbiscapum* differs by the stouter filiform shape of these organs, which are rather densely ciliated beneath. These differences might justify generic separation; but intermediate species, such as *L. scopiferum* (having the facies and robust antennæ of *L. barbiscapum*, but with unciliated antennal joints and smooth elytra) and *L. saronotum*, completely bridge over the interval. *L. acutispine* is the only known species which has distinct lateral carinæ.

About a dozen species of *Lophopœum* are known, all Tropical-American.

1. **Lophopœum saronotum.** (Tab. XII. fig. 12.)

Lophopœum saronoto (errore typogr.), Trans. Ent. Soc. 1872, p. 215 [1].

Hab. Nicaragua, Chontales (*Belt* [1]).

2. **Lophopœum scopiferum.**

Lophopœum scopiferum, Bates, Trans. Ent. Soc. 1872, p. 215 [1].

Hab. Mexico, Chinantla (*Sallé*); Guatemala, Panzos (*Champion*); British Honduras, Belize (*Blancaneaux*); Nicaragua, Chontales (*Belt* [1]).

The thin, pale, flexuous or zigzag transverse line which crosses the elytra a little after the middle is lighter coloured, better defined, and more continuous in the Guatemala and Belize examples than it is in those from Chontales and Mexico.

3. **Lophopœum barbiscapum.** (Tab. XII. fig. 11.)

Lophopœum barbiscapum, Bates, Trans. Ent. Soc. 1872, p. 214 [1].

Hab. Guatemala, San Gerónimo (*Champion*); Nicaragua, Chontales (*Belt* [1], *Janson*).

COSMOTOMA.

Cosmotoma, Blanchard, Hist. des Insectes, ii. p. 155 (1845).
Beltista, Thomson, Class. Long. p. 16 (1860).

The true position of this genus, which differs so strikingly from its allied genera in the elegant tufts of hair which ornament the antennæ, is evidently here, many parts of its structure having a close resemblance to those of *Lophopœum scopiferum* and *barbiscapum*. The anterior acetabular sutures are tightly closed; but the forehead is more prolonged below the eyes than is usual in Acanthocinini. Four species are known from Tropical South America and San Domingo.

1. **Cosmotoma rubella.** (Tab. XIII. fig. 8.)

Cosmotoma rubella, Bates, Ann. & Mag. Nat. Hist. ser. 3, xiii. p. 148 (1864) [2]; id. Trans. Ent. Soc. 1872, p. 237 [1].

Hab. NICARAGUA, Chontales (*Belt* [1]).—SOUTH AMERICA, Amazons [2].

Mr. Belt appears to have met with only one example of this insect.

IDEPHRYNUS.

Corpus elongato-ovatum, supra valde tuberculatum et parce cristatum. Caput antice transversum, verticale, infra oculos parvulos modice prolongatum, inter antennas parum depressum. Antennæ (♂) corpore fere duplo longiores, robustæ, filiformes, subtus parce setosæ; scapus modice elongatus, mox a basi dilatatus, deinde usque ad apicem clavam æqualem oblongo-cylindricam efficiens; articulus tertius paulo longior quam scapus. Thorax subquadratus, utrinque medio latere tuberculo valido conico, alteroque minore anteriore, alterisque duobus elevatis discoidalibus armatus. Scutellum marginibus lateralibus elevatis. Elytra versus apicem angustata, apice utrinque longe unispinosa; supra modice convexa, valde inæqualia, carina centro-basali utrinque crassa tuberculata, alteris tuberculis in series irregulares longitudinales tres vel quatuor digestis. Pedes, sicut in *Alcidio, Lophopœo,* etc., validi; femora clavata; tarsi posteriores articulo primo duobus sequentibus æquali. Pro- et mesosternum subangusta.

The affinities of the singular little species for which this genus is constituted are with *Leptostylus* and *Lophopœum*, especially with such species of the latter as have roughened or fasciculated elytra and bituberculated disk of thorax.

3. **Idephrynus scaber.**

Fuscus, elytris signatura Λ-formi suturali paulo ante medium, antennarumque articulis basi (tertio quoque annulo mediano) testaceis; elytris punctatis, seriatim tuberculatis, tuberculis centro-basalibus et alteris utrinque prope medium longioribus; pedibus testaceo-variegatis.
Long. $4\frac{1}{4}$ lin.

Hab. MEXICO, Cordova (*Sallé*).

This curious insect has a general resemblance to certain Dorcadionini, especially *Dorcadida bilocularis* (White).

LEPTOCOMETES.

Generi *Anisopodo* affinis, at differt inter alia thoracis tuberculis lateralibus medianis. Corpus elongatum, gracile, parum convexum. Caput antice verticale, fronte brevi; oculi magni; vertex inter antennas valde concava. Antennæ (♂) corpore duplo longiores, basin versus infra longe et sparse setosæ; scapo elongato, subtus vix flexuoso; articulis 3°–11^m^ longitudine fere æqualibus, scapo vix brevioribus. Thorax subquadratus, dorso antico grosse bituberculato, tuberculis lateralibus grossis fere medianis apice spina acuta armatis. Elytra elongata, postice gradatim attenuata, epipleuris verticalibus haud carinatis, apice sinuato-truncata bidentata, tota superficie longe erecte setosa, tuberculis centro-basalibus obtusis. Pedes elongati; femora clavata, longe pedunculata; tarsi postici graciles, articulo primo quam duo sequentes longiore. Prosternum angustissimum; mesosternum angustum; coxæ globosæ, paullo exstantes.

The slender form, voluminous lower lobe of the eyes, and narrow pro- and mesosterna indicate the close affinity of this genus to *Anisopodus*, from which the thoracic tubercles and long hairy elytra amply distinguish it. The form of the lateral tubercles of the thorax differs from that of the preceding genera, the apex of the protuberance forming a retrocurved point as in *Leiopus*. Besides the two large obtuse tubercles on the anterior part of the disk of the thorax, there are two others, much less elevated, on the posterior part.

1. **Leptocometes hispidus.**

Olivaceo-griseus, elytris macula magna obliqua laterali postmediana atro-fusca; antennarum articulis basi, femoribus basi, tibiis medio articuloque primo tarsorum flavo-testaceis.

Long. 5 lin. ♂.

Hab. MEXICO, Cordova (*Sallé*).

The long, erect, and rather fine setæ of the elytra are implanted each in a puncture, which, along the suture, is accompanied by an elevated granule. The elytra are depressed behind and on the outer sides of the centro-basal elevations; and the apical truncature is slightly oblique, sinuate, with the exterior angle considerably prolonged and dentiform.

OZINEUS.

Ozineus, Bates, Ann. & Mag. Nat. Hist. ser. 3, xii. p. 278 (1863).

With this genus commences the series of Acanthocinini allied to *Leiopus*, in which the lateral armature of the thorax is more or less approximated to the hind angles, and presents the form of an oblique spine.

Eight species of *Ozineus* have been described, all from Tropical America.

1. **Ozineus arietinus.** (Tab. XII. fig. 1.)

Ozineus arietinus, Bates, Trans. Ent. Soc. 1872, p. 215[1].

Hab. MEXICO, Cordova (*Sallé*); GUATEMALA, Vera Paz (*Champion*); NICARAGUA, Chontales (*Belt*[1], *Janson*).

2. **Ozineus torquatus.**

O. arietino affinis, convexiusculus; fuscus, corpore subtus, pedibus et antennis flavo-testaceis, harum articulis apice, femoribus medio, tibiis et tarsis apice fuscis; thorace fascia antica arcuata signaturisque nonnullis cinereo-flavis; elytris sutura angusta lineisque valde obliquis et angulatis duabus transversis (prima juxta medium, secunda ante apicem) cinereis, apice obtuse et oblique truncatis.

Long. $3\frac{1}{2}$ lin. ♀.

Hab. GUATEMALA, Zapote, El Reposo, San Isidro, Cerro Zunil (*Champion*).

ANISOPODUS.

Anisopus, Serville, Ann. Soc. Ent. Fr. 1835, p. 30 (nom. præocc.).

Leptoscelis (Dejean, Cat.), Erichson, Consp. Ins. Col. Peruana, in Wiegm. Arch. 1847, i. p. 145 (nom. præocc.).

Anisopodus, White, Cat. Long. Col. Brit. Mus. ii. p. 349 (1855); Bates, Ann. & Mag. Nat. Hist. ser. 3, xii. p. 282 (1863); Thomson, Syst. Ceramb. 1864, p. 544; Burmeister, Longicornia Argentina, in Stett. ent. Zeit. 1865, p. 178.

Anisopus, Gemminger et Harold, Cat. Col. p. 3150 (1873).

Upwards of twenty species of this well-marked genus have been described, all Tropical-American except one, which occurs in the temperate zone of South America. The most conspicuous distinguishing character is the length of the hind legs, which in some species assume almost monstrous proportions. The body is elongate and depressed, free from inequalities above; the thoracic spine is small, and situated near the hind angles; the pro- and mesosterna are narrow, the haunches globular, and the forehead very short, prolonged but slightly below the voluminous lower lobes of the eyes.

1. **Anisopodus phalangodes.** (Tab. XII. fig. 6.)

Leptoscelis phalangodes, Erichson, Wiegm. Arch. 1847, i. p. 145[1].

Anisopodus phalangodes, Bates, Ann. & Mag. Nat. Hist. ser. 3, xii. p. 283 (1863)[2]; id. Trans. Ent. Soc. 1872, p. 215[3].

Hab. MEXICO, Cordova (*Sallé*); NICARAGUA, Chontales (*Belt*[3], *Janson*).—SOUTH AMERICA, East Peru[1], Amazons[2].

The species figured is from Chontales.

2. **Anisopodus mexicanus.**

Elongatus, subdepressus, cinereo-fulvus, elytris guttis atro-fuscis parvis indistinctis irregulariter sparsis maculaque magna triangulari laterali post medium atro-fuscis; thorace trapezoidali, lateribus rectis, spina laterali parva haud exstante; elytris ante apicem angustatis sed haud sinuatis, apice emarginato-truncatis, utrinque bidentatis, dente exteriore paullo majore. Femora postica ♂ corpore multo longiora, ♀ corpore paullo breviora.

Long. $4\frac{1}{2}$–$6\frac{1}{2}$ lin. ♂ ♀.

Hab. MEXICO, Tuxtla, Cordova (*Sallé*); GUATEMALA, Teleman (*Champion*).

Similar in size and general appearance to *A. phalangodes*, but widely different in many points of structure. The thorax, instead of being rounded at the sides, with the lateral armature standing out abruptly as a distinct spine, is of trapezoidal form, with oblique and perfectly rectilinear sides, which contract only behind the lateral armature, so that the apex of the tooth or spine is continuous with the lateral margin. The apex of the elytra is also differently truncated and toothed, the sinuation being narrow and very deep, and the sutural angle forming a projecting tooth as well as the external one, although shorter. The small black spots of the elytral surface are much smaller and more irregularly scattered. The hind femora in the female do not reach the apex of the elytra.

3. **Anisopodus hamaticollis.** (Tab. XII. figs. 4 ♀, 5 ♂.)

Anisopodus hamaticollis, Bates, Trans. Ent. Soc. 1872, p. 236[1].

Hab. Mexico, Cordova (*Sallé*); Nicaragua, Chontales (*Belt*[1]).

4. **Anisopodus scriptipennis.** (Tab. XII. fig. 7, var. fig. 3.)

Anisopodus scriptipennis, Bates, Trans. Ent. Soc. 1872, p. 236.

Hab. Guatemala, Cerro Zunil (*Champion*); Nicaragua, Chontales (*Belt*).

The specimens figured are from Chontales. All Mr. Champion's examples from the Cerro Zunil are more strongly marked even than in fig. 7, the black lines near the apex being more numerous and extending nearly to the terminal spine.

5. **Anisopodus argus.** (Tab. XII. fig. 2.)

Anisopodus argus, Bates, Trans. Ent. Soc. 1872, p. 216[1].

Hab. Nicaragua, Chontales (*Belt*[1], *Janson*).

6. **Anisopodus pusillus.**

Anisopodus pusillus, Bates, Ann. & Mag. Nat. Hist. ser. 3, xii. p. 285 (1863)[1]; id. Trans. Ent. Soc. 1872, p. 236[2].

Hab. Mexico, Cordova (*Sallé*); Nicaragua, Chontales (*Belt*[2]).—South America, Amazons[1].

7. **Anisopodus xylinus.**

Modice elongatus, fulvus, thorace maculis dorsalibus, elytris utrinque vittis macularis tribus, fascia mediana valde flexuosa, plagisque apud epipleuras et apicem fuscis; thorace valde transverso, antice modice et recte angustato, spina laterali valida exstante, dorso utrinque grosse punctato; elytris versus apicem gradatim attenuatis, apice sinuato-truncatis angulo exteriore valde producto, dorso (apice excepto) subcrebre

punctato, supra epipleuras verticales haud carinato ; pro- et mesosterno latiusculis ; femoribus apice vix clavatis.

Long. $4\frac{1}{4}$ lin. ♂.

Hab. Costa Rica (*coll. Bates*).

In outline this species does not materially differ from *L. scriptipennis* ; but the posterior femora, though a little longer than the body, are not perceptibly clavate, being gradually and moderately thickened. This structure is foreign to the typical species of the genus ; but the elytral epipleuræ are distinctly vertical, and the facies of the insect is that of *Anisopodus*, rather than of *Lepturges*. The coloration is remarkable, the whole under-surface, the head, antennæ, and legs being of a rather clear, tawny yellowish, which hue (a little less clear) forms the ground-colour of the thorax and elytra, on which are longitudinal streaks and spots, and on the elytra a median strongly zigzag belt of a dark-brown hue. The epipleuræ of the elytra have dark-brown patches ; and there is also a short broadish vitta on the disk near the apex on each side.

8. **Anisopodus pardalis.**

Parvus, oblongus, depressus, griseus, thorace elytrisque rufescenti-marginatis, illo maculis rotundis quatuor transversim positis, his utrinque maculis similibus circiter viginti nigris ; scutello nigro ; pedibus fuscis, femoribus (apice excepto) rufo-testaceis ; antennis nigris ; thorace antice modice rotundato-angustato, spina laterali distincta, exstante ; elytris crebre punctulatis, apice vix attenuatis, sinuato-truncatis, utrinque breviter bidentatis, dente exteriore paullo majore ; epipleuris supra obtuse carinatis ; femoribus posticis (♂ ?) clavatis, corporis apicem paullulum excedentibus.

Long. $2\frac{1}{2}$–$3\frac{1}{4}$ lin.

Hab. Mexico, Juquila (*Sallé*).

This charming little species has more the form of a *Lepturges* than of an *Anisopodus* ; but the vertical epipleuræ of the elytra, separated from the flattened disk by a distinct though blunt keel, prove that it belongs to the latter genus. The ground-colour is a uniform bluish grey ; and the numerous black spots of the elytra are sprinkled nearly at equal distances over the surface.

9. **Anisopodus callistus.**

Parvus, elongatus, gracilis, depressus, rufescens cano-tomentosus, thorace vittis duabus antice dilatatis, elytrorumque lateribus plaga juxta scutellum et area apicali nigris, hac literis tenuibus griseis ornata ; thorace antice paullo angustato, apud spinæ lateralis basin tumido, spina ipsa gracili acuta exstante ; elytris apice paullo oblique truncatis angulis distinctis sed non productis, epipleuris supra haud carinatis ; antennis rufescentibus ; pedibus nigris, femoribus tibiisque basi flavo-testaceis, femoribus valde clavatis, pedunculatis, ♂ paullo longioribus.

Long. 3 lin.

Hab. Guatemala, Quiche Mountains, 7000 to 9000 feet (*Champion*).

The markings of the elytra in this pretty little species form an elegant pattern, difficult to describe in an intelligible manner. The ground-colour is a pinkish tawny, converted into grey, in places, by the condensation of the fine hoary pubescence, which

latter forms near the black outer border and in the middle of the black apical area various transverse or oblique and zigzag lines; an obscure dark brown patch is also seen on each side of the suture behind the scutellum. It is the only species known in which the angles of the apical truncature of the elytra are not spinose or produced, and in this respect does not differ from the typical *Lepturges*.

PATTALINUS.

Anisopodo et *Lepturgi* proxime affinis, at differt antennarum articulo sexto vel quinto apice subtus dente armato. Corpus elongato-oblongum, læve, depressum. Caput antice breve, fronte infra angustata; oculi magni. Antennæ (♂) corpore plusquam duplo longiores, subnudæ, articulo tertio quam scapus vel articuli sequentes haud longiore, sexto vel quinto apice subtus denticulo conspicuo parvo armato. Thorax antice modice subrecte angustatus, spina laterali, lata, acuta, sat ante basin sita, deinde lateribus sinuatim modice angustatis. Elytra subdepressa, epipleuris verticalibus sed haud carinatis, apice sinuato-truncata. Pro- et mesosternum angustissima. Pedes sat elongati; femora postica elytris vix breviora, paullulum incrassata; tarsi postici articulo primo quam sequentes duo conjuncti longiore.

The minute dentiform projection existing, in one species at the apex of the sixth, and in another of the fifth, antennal joint is of similar nature to that of the sixth joint in the males of *Lagochirus*. The same curious structure distinguishes also the North-American genus *Cœnopœus* (Horn) and the South-American *Amniscus*; but in the last-named it is on the third instead of the sixth joint. *Pattalinus* differs from all three by the spined thorax and smooth surface of the body. There is so close an affinity in all other respects between the two species described below, that I am inclined to disregard the curious difference in the situation of the armature of the antennæ, and include them in one genus.

1. **Pattalinus charis.**

Canescens, abdomine, pedibus et antennis flavo-testaceis, harum articulis (a 3°) apice tibiisque apice nigris; thorace vittis duabus dorsalibus, elytris vittula curvata centro-basali, altera laterali sub humeris, fasciis duabus postmedianis tenuibus valde flexuosis nigris, apice profunde sinuato-truncatis, utrinque bidentatis, dente exteriore longiore.

Long. $3\frac{3}{4}$ lin. ♂.

Hab. Mexico, Cordova (*Sallé*).

2. **Pattalinus cultus.**

Griseo-sericeus, capite, antennis et pedibus rufescenti-fuscis; thorace vittis duabus dorsalibus alterisque lateralibus, elytris lineolis elongatis plurimis basalibus, epipleuris basi, vittula apicali fasciaque valde dentata longe post medium atro-fuscis; thorace ab spinæ apice usque ad angulum anteriorem sat angustato, pone spinam sinuatim modice constricto: elytris apice sinuato-truncatis, angulo exteriore modice, suturali haud producto; femoribus posticis magis incrassatis, tarsis paullo brevioribus.

Long. 4 lin.

Hab. Mexico, Cordova (*Sallé*).

LEPTURGES.

Lepturges, Bates, Ann. & Mag. Nat. Hist. ser. 3, xii. p. 367 (1863) ; Horn, Trans. Am. Ent. Soc. viii. p. 126 (1880).

Dr. Horn has improved the definition of this genus by adding to the characters I originally gave a further one drawn from the pro- and mesosterna, both of which, as he correctly states, are very narrow and barely wide enough to separate the coxæ. In the more typical species the front of the head is short, and the lower lobes of the eyes voluminous as in *Anisopodus*; the epipleura of the elytra, however, are not strictly vertical or separated from the dorsal surface by a sharp line; and the hind femora are linear or but obliquely thickened. The less typical species have clavate femora, and in some cases are scarcely distinguishable from *Leiopus*. In all, the thorax has a sharp lateral spine, either close to, or a short distance from, the hind angles, the space between the angle and the spine, in the latter case, being deeply sinuate.

About fifty species, including those about to be described, are known, all from Tropical and North America.

1. **Lepturges infilatus.** (Tab. XIII. fig. 3.)

Lepturges infilatus, Bates, Trans. Ent. Soc. 1872, p. 216[1].

Hab. Mexico, Juquila, Cordova (*Sallé*); Guatemala, Chacoj (*Champion*); Nicaragua, Chontales (*Belt*[1]).

2. **Lepturges limpidus.**

Lepturges limpidus, Bates, Trans. Ent. Soc. 1872, p. 216[1].

Hab. Mexico, Cordova (*Sallé*); Guatemala, Panzos (*Champion*); Nicaragua, Chontales (*Belt*[1]).

3. **Lepturges macilentus.**

L. infilato et *limpido* proxime affinis, differt corpore multo angustiore, lateribus magis parallelis, elytrisque supra minus variegatis. Angustus, elongatus, depressus, rufescens, griseo subtiliter tomentosus, thorace vittis obsoletis, elytris lineola parva prope scutellum, macula humerali, plaga elongata dilacerata mediana intus ramum angustum angulatum usque ad suturam emittente fasciaque dentata abbreviata ante apicem fusco-rufescentibus; thorace trapezoidali elongato, spina laterali (conica, acuta) juxta angulum sita, margine obliquo inter spinam et basin; elytris elongatis, apice singulatim rotundatis; antennis pedibusque rufescentibus, griseo tomentosis.

Long. 3½ lin.

Hab. Mexico, Cordova, Playa Vicente (*Sallé*).

The long and irregular medio-lateral patch of the elytra is connected by slender branches both with the spot under the shoulders and the short flexuous anteapical fascia. The species resembles most closely, in colours and markings, *L. limpidus*; but it is of much narrower form, and the lateral spine of the thorax is nearer the hind

angle. The reddish markings of the elytra are also of less extent; and the thorax is nearly spotless grey.

4. **Lepturges sejunctimacula.**

L. infilato coloribus similis, sed minor et postice minus angustatus, elytris utrinque prope apicem macula atro-fusca insulata primo intuitu distinguendus. Atro-fuscus, flavo-cinereo indutus, thorace vittis duabus (antice intus curvatis), elytris lineola basali (suturæ parallela), gutta humerali, plaga magna mediana laterali valde dentata, maculaque integra ante apicem nigris; antennis pedibusque rufo-testaceis, fusco plus minusve maculatis; thorace trapezoidali, spina laterali (conica, acuta) juxta angulum sita, margine valde obliquo inter spinam et basin; elytris oblique obtusissime truncatis; femoribus paullo incrassatis, haud pedunculatis.

Long. 2–2$\frac{1}{3}$ lin.

Hab. GUATEMALA, El Reposo (*Champion*).

5. **Lepturges inscriptus.**

Lepturges inscriptus, Bates, Ann. & Mag. Nat. Hist. ser. 3, xii. 1863, p. 371[1]; id. Trans. Ent. Soc. 1872, p. 217[2].

Lepturges fragillimus, Bates, Trans. Ent. Soc. 1873, p. 230 (nec *L. fragillimus*, Bates, Ann. & Mag. Nat. Hist. 1863, xii. p. 373).

Hab. MEXICO, Cordova (*Sallé*); NICARAGUA, Chontales (*Belt*[2]).—SOUTH AMERICA, Upper Amazons[1].

A Mexican specimen from the Sallé collection agrees closely with the typical example from the Upper Amazons; but other Mexican specimens, and all those I have seen from Chontales, differ in the dark spots of the elytra (especially those on the sides and near the shoulders) being less connected, and in the basal spot (near the scutellum) forming an elongate streak. These latter make some approach to *L. fragillimus* from the Amazons, to which I formerly referred them; but on the examination of a long series of both sexes I am inclined to consider them quite distinct from that species.

6. **Lepturges sexvittatus.**

Lepturges sexvittatus, Bates, Trans. Ent. Soc. 1873, p. 230.

Hab. NICARAGUA, Chontales (*Belt*).

7. **Lepturges gratiosus.** (Tab. XII. fig. 20*.)

Lepturges gratiosus, Bates, Trans. Ent. Soc. 1873, p. 231.

Hab. NICARAGUA, Chontales (*Belt*).

8. **Lepturges festivus.** (Tab. XIII. fig. 4†.)

Lepturges festivus, Trans. Ent. Soc. 1872, p. 236.

Hab. NICARAGUA, Chontales (*Belt*).

* The lateral spine near the hind angles of the thorax is represented too short and obtuse in the figure.

† The acute lateral spine of the thorax has been omitted by the artist.

9. **Lepturges janus.**

Elongato-ovatus, obscure lutoso-fuscus, corpore subtus, partibus oris, pedibus antennisque partim fulvo-testaceis; interdum totus fulvo-testaceus, elytris lateribus tantum fuscis; capite antice brevissimo; thorace trapezoidali, spina laterali valida, exstante, a basi sat distante, basi supra transversim depresso; elytris punctulatis apice obtusissime breviter truncatis.

Long. $2\frac{1}{2}$–4 lin.

Hab. MEXICO, Puebla, Oaxaca, Chiapas (*Sallé*).

10. **Lepturges sordidus.**

Elongato-oblongus, depressus, supra sordide fuscus, elytris basi (margines versus) et ante apicem obscure fuscis griseo paullo variegatis; antennis et pedibus fulvo-testaceis, harum articulis apice, femoribus tibiis tarsisque dimidiis apicalibus atro-fuscis; thorace trapezoidali, basi contracto et supra depresso, spina laterali acuta valida exstante a basi sat distante; elytris punctulatis, apice oblique obtuse truncatis, supra medio dorso sat depresso; tibiis antice paullo dilatatis; femoribus sat incrassatis.

Long. $1\frac{3}{4}$–3 lin.

Hab. GUATEMALA, Calderas, Senahu (*Champion*).

An obscurely coloured species very closely allied to *L. janus*, but differing in its more oblong, less ovate, and more depressed form, and in the more variegated elytra, antennæ, and legs. In the more distinctly marked examples the blackish limb of the elytra (speckled with grey) is dilated towards the suture beyond the middle.

11. **Lepturges clerulus.** (Tab. XIV. fig. 5.)

Parvus, angustus, niger, griseo-sericeus, antennarum articulis 2°–11^{m} rufo-testaceis apice nigris, femoribus et tarsis basi tibiisque annulo rufo-testaceis; capite antice lato convexo, oculis sat parvis; thorace subquadrato, antice leviter angustato, spina laterali valida, supra linea basali transversa punctata impressa, margine basali rufescente; elytris apice sinuato-truncatis, angulo exteriore producto, dorso fulvo-griseis, macula triangulari scutellari, lunula humerali, fasciisque duabus latis dentatis (prima mox pone medium, secunda ante apicem) suturam haud attingentibus nigris, lineolisque nonnullis ante fasciam primam fuscis.

Long. $2\frac{1}{4}$ lin.

Hab. GUATEMALA, Calderas (*Champion*).

12. **Lepturges multinotatus.**

Parvus, elongato-ovatus, depressus, niger griseo-sericeus, antennis rufo-testaceis, articulis apice fuscis, pedibus pallide testaceis, femoribus, tibiis tarsisque apice plus minusve fuscis; capite antice lato, convexo; thorace transverso trapezoidali, sulco basali punctato, spina laterali valida, supra fulvo-testaceo vittulis indistinctis nigro-griseis; elytris sinuato-truncatis, angulo exteriore dentiformi, dorso fulvo-griseis lineolis plurimis (versus latera partim confluentibus) atro-fuscis.

Long. $1\frac{1}{2}$–$2\frac{3}{4}$ lin.

Hab. GUATEMALA, Zapote, Cerro Zunil (*Champion*); NICARAGUA, Chontales (*Belt*, *Janson*).

The examples from Cerro Zunil are lighter in colours than those from Zapote, and the numerous short dark lines on the elytra are not only paler brown in hue but less distinctly defined; the legs are very pale-coloured, with a thin streak across the femora and the apices of the tibiæ and the tarsal joints blackish.

This and the following species are closely allied to *L. deliciolus* from the Amazons, but differ sufficiently in being more elongate and flatter, as well as in the disposition of the dark markings of the elytra.

13. **Lepturges fasciatus.**

L. multinotato proxime affinis, at differt macula angulari magna circa scutellum, fasciaque flexuosa pone medium elytrorum nigris. Paullo brevior, et minus depressus, griseo-niger, thorace medio et basi pallido; elytris griseo-fulvis, macula magna triangulari circumscutellari, fascia flexuosa pone medium lineolisque plurimis ante medium et prope apicem fusco-nigris, apice obtusissime oblique truncatis; cæteris ut in *L. multinotato*.

Long. $1\frac{1}{2}$–2 lin.

Hab. GUATEMALA, San Gerónimo (*Champion*).

14. **Lepturges laticollis.**

Parvus, breviusculus, subconvexus, thorace lato et brevi, antice paullo angustato, spina laterali valida paullo hamata; niger, griseo-sericeus; antennis pedibusque testaceis, illarum articulorum, necnon femorum tibiarumque apicibus fuscis; elytris (apice fere rotundatis) fulvo-griseis, macula triangulari circumscutellari, fascia pone medium lateribus dilatata, et macula utrinque triangulari juxta apicem (suturam haud attingente) nigris.

Long. $1\frac{1}{2}$ lin.

Hab. GUATEMALA, near the city (*Salvin*), Zapote, Cerro Zunil (*Champion*).

Much shorter and more convex than *L. fasciatus*, and having a shorter and broader thorax, the sides of which are slightly tumid at the base of the lateral spine. The hind femora, as in the two preceding species, are considerably thickened. There are no traces of lineoles in the apical pale area of the elytra, their place being supplied by a central black or brown triangular spot nearly or quite reaching the apical margin, but leaving a free pale sutural border. In the pale space between the scutellar patch and the median belt there are faint traces of dark lineoles in one of the examples.

15. **Lepturges tumidicollis.**

L. laticolli affinis, sed latius ovatus et aliter coloratus. Fulvescens, capite, thorace disco, elytris maculis indistinctis, quarum una subbasali versus humerum, secunda postice tridentata pone disci medium tertiaque elongata apicali magis conspicuis, atro-fuscis, fasciaque obliqua mediana plus minusve distincta pallidiore; capite lato, fronte brevi, infra angustata; thorace valde transverso, lateribus antice rotundatis ante spinam angulatim dilatatis, sulco postico-marginali profunde punctato; elytris parum convexis, grosse crebre punctatis, apice subacute rotundatis; pedibus pallidis, femoribus sat clavatis, clavis (iis femorum posticorum exceptis), tibiis tarsisque apice infuscatis; antennis pallidis, articulis apice fuscis, tertio quam scapus paullo longiore.

Long. $1\frac{3}{4}$–2 lin.

Hab. GUATEMALA, Zapote, Cerro Zunil, Chiacam, San Juan (*Champion*); NICARAGUA, Chontales (*Janson*).

The dusky markings on the tawny-ochreous elytra vary a little in number and shape; but the base from shoulder to shoulder is always spotless, and there is no indication of the triangular circumscutellar patch which distinguishes the two preceding species.

The black spot near the base sometimes extends almost to the sides, like a fascia; and in the Chontales specimen the median spot is not dentate, but forms a nearly compact oblique fascia.

16. **Lepturges unilineatus.**

Lepturges unilineatus, Bates, Trans. Ent. Soc. 1872, p. 237[1] (♂ nec ♀).

Hab. NICARAGUA, Chontales (*Belt* [1]).

This is an elongate-oblong species, allied to *L. multinotatus*, *clerulus*, &c., having a similar trapezoidal form of thorax, with straight sides; the head in the middle is rosy red, like the surface of the thorax. In the description above cited I described as the female an insect which I now believe to be of a totally different species, in which the thorax is very similar in form to that of *L. tumidicollis*.

17. **Lepturges ruficollis.**

Lepturges unilineatus, Bates, Trans. Ent. Soc. 1872, p. 237[1] (♀ nec ♂).

Parvus, oblongus, parum convexus, niger, griseo-sericeus, thorace (supra et infra) femoribusque basi rufis, illo lateribus supra cano-pubescente; capite parvo (nigro), fronte infra angustata; thorace valde transverso, lateribus antice rotundatis, ante spinam hamatam angulatim dilatatis, sulco postico punctato; elytris apice obtuse rotundatis, dorso crebre punctatis, nigris, linea utrinque grisea interdum indistincta; femoribus posticis vix incrassatis; antennis rufescenti-fuscis, articulo tertio quam scapus longiore.

Long. 2 lin.

Hab. NICARAGUA, Chontales (*Belt* [1]).

18. **Lepturges mixtus.**

Lepturges musculus, Bates, Trans. Ent. Soc. 1872, p. 236 (nec Bates, Ann. & Mag. Nat. Hist. 1863, xii. p. 375).

L. tumidicolli prima facie simillimus, at differt thorace angustiore trapezoidali lateribus rectis, elytrisque apice sinuatim oblique truncatis angulo exteriore producto. Elongato-subovatus, sordide fulvescens, capite antice, thorace vittis dorsalibus, elytrisque maculis variis fuscis, his partim fusco et fulvo marmoratis maculis utrinque tribus (prima centro-basali, secunda obliqua mediana tertiaque vittæformi apicali) distinctioribus; antennis pedibusque pallide testaceis, illis articulis apice, femoribus (posticis exceptis), tibiis tarsisque apice atro-fuscis.

Long. 2 lin.

Hab. NICARAGUA, Chontales (*Belt*).

Erroneously referred by me (*ut sup. cit.*) to *L. musculus* from a single abraded specimen in Mr. Belt's collection.

19. **Lepturges stigmaticus.**

Parvus, oblongo-ovatus, rufo-testaceus, elytris utrinque litura curvata atro-fusca sub humero incipiente versus discum curvata et ante marginem postico-lateralem desinente; thorace et elytris atomis fuscis quoque sparsis, apud thoracis discum et versus elytrorum apicem in maculas aggregatis; antennis pallidis, scapo annulo mediano, cæteris articulis apice atro-fuscis; pedibus rufo-testaceis, tibiis apice tarsisque nigro maculatis; thorace transversim quadrato, vix antice angustato, spina laterali paulo ante angulum sita,

valida, acutissima, retrorsum spectante; elytris postice convexis, apice rotundatis, dorso pilis erectis nonnullis obsitis.

Long. $1\frac{2}{3}$ lin.

Hab. Guatemala, San Gerónimo (*Champion*).

The few long soft hairs which spring from the surface of the elytra are of different nature from the rigid bristles which are seen in *Phrissolaus* and *Sporetus*, and seem not to indicate any generic distinction from *Lepturges*. The species is closely allied to *L. mixtus*, having a similar form of thorax; but the elytra offer no trace of truncature. The black lateral mark of the elytra, seen from above, looks like a large semioval spot with its convex side approaching the suture; but it consists really of a thick and not well-defined flexuous streak, which commences under the humeral angle, runs for a space along the epipleura, and then curves towards the disk, terminating beyond the middle without reaching again the lateral margin.

20. **Lepturges tigrellus.**

Lepturges tigrellus, Bates, Trans. Ent. Soc. 1873, p. 231.

Hab. Nicaragua, Chontales (*Belt*).

21. **Lepturges navicularis.** (Tab. XIII. fig. 5*.)

Lepturges navicularis, Bates, Trans. Ent. Soc. 1872, p. 217[1].

Hab. Mexico, Cordova (*Sallé*); Nicaragua, Chontales (*Belt*[1]).

In Mexican specimens the grey longitudinal markings of the elytra are scarcely perceptible.

CARPHONTES.

Lepturgi proxime affinis, differt mesosterno lato tarsisque posticis brevissimis. Corpus ovatum, convexum, haud setosum. Caput breve, infra angustatum; oculi magni; frons convexa. Antennæ setaceæ, scapo valde elongato, subtus paullo flexuoso, articulo tertio scapo subæquali, 4°–11^{m} brevioribus, decrescentibus. Thorax valde transversus, spina laterali valida, conica, acuta, paullo ante basin sita; ante spinam valde angustatus, post spinam modice constrictus; dorsum convexorum, æquale. Elytra convexa, æqualia, apice obtusissime oblique truncata. Pedes breves; femora modice incrassata; tarsorum posticorum articulus primus 2° et 3° conjunctim æqualis. Prosternum sat latum; mesosternum latum, postice angustatum. Abdomen utriusque sexus apice obtusum, ♀ nullo modo elongatum.

A genus formed for the reception of a species having much resemblance in general form to *Lepturges navicularis*, *ovalis*, and *scutellatus*, but differing from them and from all other species of *Lepturges* by the wide mesosternum (which is quite as broad as in the typical species of *Nyssodrys*) and the short hind tarsi (which are quite as short as in *Leptostylus* and *Alcidion*). The rounded apical segment of the abdomen, both of the ventral and the dorsal plate, distinguish it from *Probatius* and *Oxathres*, to which the species bears some resemblance in the form of the thorax.

* The minute but distinct and acute lateral spine of the thorax has been omitted in this figure.

1. **Carphontes posticalis.**

Rufo-castaneus, capite thoraceque obscurioribus, cinereo indistincte lituratis; elytris postice plaga elongata, suturali griseo-alba.

Long. $2\frac{1}{4}$–3 lin.

Hab. GUATEMALA, San Gerónimo (*Champion*).

PHRISSOLAUS.

Lepturgi affinis, at differt antennis et elytris rigide setosis, feminaque ovipositore elongato subtubulari munita. Corpus parvum, convexum, naviculare. Caput antice latum, breve; oculi maximi. Antennæ corpore duplo longiores, subtus sat dense rigide setosæ, articulo tertio quam scapus paullo longiore. Thorax paullo transversus, antice modice subrecte angustatus, spina laterali valida, acutissima, acuta, extante, prope angulum posticum sita, pone spinam lateribus sinuatim modice constrictis, basi supra depressa. Elytra convexa, apicem versus attenuata, apice valde oblique sinuatim truncata, angulo exteriore longe producto, supra setis rigidis lineatim digestis. Pro- et mesosterna ut in *Leiopo* angustata. Femora haud elongata, clavata; tarsi breves, postici articulo primo quam duo sequentes longiore.

♂. Segmentum terminale dorsale attenuatum, acutum; ventrale elongatum, obtusum.

♀. Segmentum terminale mox a basi modice angustatum, elongatum, subtubulare, laminis dorsali et ventrali apice rotundatis.

This genus bears a similar relation to *Lepturges* as *Sporetus* to *Nyssodrys*, being distinguished from its allied genus by the bristly clothing of antennæ and elytra. But it has a further distinctive character, peculiar to itself, in the terminal segment of the abdomen in the female being lengthened to form a sheath to the ovipositor, in a way not seen in any of the allied genera. Without projecting much beyond the tips of the elytra, the segment is longer than all the remaining segments taken together, and is nearly of equal width from the base to the apex, the latter being entire and rounded in both the dorsal and ventral valves.

I should have referred the species described below to the North-American genus *Graphisurus* (Kirby), the characters of which have been recently established in a satisfactory manner by Dr. Horn (Trans. Amer. Ent. Soc. viii. p. 129), had it not been for the difference in the ventral plate of the ovipositor, which, in *Graphisurus*, is described as emarginated.

1. **Phrissolaus inspersus.**

Cano-griseus, antennis, thoracis vittis duabus (interdum indistinctis) elytrorumque guttulis numerosis (seriatim ordinatis et setiferis) fusco-nigris.

Long. $1\frac{3}{4}$–$2\frac{1}{2}$ lin. ♂ ♀.

Hab. NICARAGUA, Chontales (*Belt*).

SYMPAGUS.

Corpus ovatum, modice convexum, læve. Frons paullo elongata et planata, pectus versus oblique retracta et infra haud angustata; oculi parvi, haud convexi. Antennæ fere nudæ, scapo elongato versus apicem clavato. Thorax sat ante marginem posteriorem angulatus nec spinosus, ante angulum multo, pone angulum paullo, recte angustatus. Elytra breviter ovata, juxta apicem sinuatim angustata, apice trans-

versim sinuato-truncata, angulo exteriore acute dentata. Pro- et mesosterna latissima, hoc paullo latius. Femora modice clavata; tarsi posteriores breves, articulo primo duobus sequentibus vix æquali.

This genus is necessary for the reception of *Lepturges lætabilis*, which differs from *Lepturges* in its wide pro- and mesosterna. In the form of the head and antennal scape it has great resemblance to the genera allied to *Anisocerus*; but the length of the scape, and especially the perfect closure of the anterior acetabular sutures, show that its right place is in the Acanthocinini group.

1. **Sympagus lætabilis.** (*Lepturges lætabilis*, Tab. XII. fig. 18.)

Lepturges lætabilis, Bates, Trans. Ent. Soc. 1872, p. 217[1].

Hab. NICARAGUA, Chontales (*Belt*[1], *Janson*).

DECTES.

Dectes, Leconte, Journ. Ac. Phil. ser. 2, ii. 1852, p. 144.
Canidia, Thomson, Archiv. Ent. i. p. 193 (1857).

Also an exclusively American genus, but having a more northerly distribution than any of the preceding genera of this group. Its head quarters appear to be Mexico, one species ranging into the middle states of North America. The following are the only species known.

1. **Dectes spinosus.**

Lamia spinosa, Say, Journ. Ac. Phil. v. 2, 1827, p. 271.
Dectes spinosus, Leconte, Journ. Ac. Phil. ser. 2, ii. 1852, p. 144.

Hab. MEXICO, San Luis Potosi (*Palmer*), Puebla (*Sallé*).—NORTH AMERICA to Kansas and New York.

2. **Dectes texanus.**

Dectes texanus, Leconte, Proc. Ac. Phil. 1862, p. 39.

Hab. NORTH AMERICA, Texas.—MEXICO, Guanajuato (*Sallé*), San Luis Potosi (*Palmer*).

Mexican specimens seem to be intermediate in the degree to which the thoracic spines project from the sides, and to connect the two species (or local forms) *spinosus* and *texanus*, the only difference between which, according to Leconte's description, is that in *spinosus* the spines stand out at an angle from the sides, and in *texanus* are continuous with the lateral margin. Dr. Horn reunites *D. texanus* to *spinosus*.

3. **Dectes cincticornis.**

Canidia cincticornis, Thomson, Archiv. Ent. i. p. 194[1].

Hab. COSTA RICA[1].

4. **Dectes mexicanus.** (Tab. XIII. fig. 6.)

Canidia mexicana, Thomson, Class. Long. p. 14[1].

Hab. Mexico[1], Cuernavaca, Cordova, Puebla (*Sallé*).

According to specimens bearing the name of this species in M. Sallé's collection, this species is extremely variable in size, colour, and markings, the extreme forms being:—(*a*) robust (6½–7 lines), uniform ashy grey, varied solely by fuscous tips to the antennal joints, elytra broad at the shoulders and tapering thence to the apex, thorax without inequalities except a faintly raised dorsal line; (*b*) less robust, narrower, sublinear, ashy brown, varied with dark brown and pale ashy spots, elytra with a pale ashy narrow fascia forming a circumflex near the middle of each elytron, thorax uneven. In all the varieties the apex of the scape beneath is recurved, forming a broad dentiform projection.

5. **Dectes spinicornis.**

D. mexicano affinis, sed magis elongatus elytrisque magis parallelis. Elongatus, subcylindricus, breviter sparsim setosus, griseo-fuscus, fusco piperitus, elytris utrinque versus apicem macula (antice oblique curvata) atro-fusca cinereo-marginata; antennis quam corpus paullo longioribus, subtiliter pilosis, scapo infra ad apicem acute spinoso ante spinam fortiter sinuato; thorace cylindrico, spina laterali recta, mox pone medium sita, dorso inæquali; elytris crebre punctatis, apice singulatim acute rotundatis.

Long. 6 lin.

Hab. Mexico (*Sturm*).

Sturm, whose collection was afterwards incorporated with that of M. Sallé, had given the MS. name of *Astynomus spinicornis* to this distinct species, which appears never to have been met with by M. Sallé himself or any of his correspondents. It differs from *D. mexicanus*, besides its more cylindrical shape and the markings of the elytra, by the antennæ being rather densely clothed to the apex with short hairs, and by the narrower and more acute spine of the antennal scape, which is besides preceded by a deep sinuation in the under surface.

6. **Dectes balteatus.**

Dectes balteatus, Lacordaire, Gen. Col. ix. p. 775[1].

Hab. Mexico, Oaxaca[1], Playa Vicente (*Sallé*); Guatemala, San Gerónimo, San Isidro (*Champion*).

OXATHRES.

Oxathres, Bates, Ann. & Mag. Nat. Hist. ser. 3, xiii. p. 50 (1864).

Of this genus, well defined by the structure of the terminal abdominal segment, four species have been described; but many others exist in collections. All are Tropical-American.

1. **Oxathres pictulus.** (Tab. XIV. fig. 1.)

Oblongo-ovatus, purpurascenti-cinereus, thorace utrinque guttis 4–5, elytris punctis plurimis et plagis utrinque quatuor purpureo-fuscis; antennis fuscis, articulis basi rufo-testaceis; thorace sat ante basin dilatato, vix tuberculato, antice gradatim, postice paullulum, angustato; elytris tuberibus centro-basalibus sat elevatis sed obtusis, carina dorsali postice conspicua, apice transversim truncatis angulo exteriori spinoso; pedibus fuscis, tibiis annulo mediano flavo-testaceo; subtus pectore ventroque medio nigris.

Long. $3\frac{1}{2}$ lin.

Hab. Guatemala, Zapote, El Zumbador, Las Mercedes (*Champion*).

The dark brown velvety patches of the elytra are situated, one near the scutellum, a second lateral extending obliquely towards the side near the shoulder, a third behind the middle transverse and bilobed, and, lastly, a fourth, much smaller, on the side near the apex.

PROBATIUS.

Probatius, Thomson, Class. Long. p. 16.

Ten species of this distinct genus have been described, all Tropical-American. One seems to be peculiar to the island of Cuba.

1. **Probatius mexicanus.** (Tab. XIII. fig. 7.)

Probatius mexicanus, Thomson, Class. Long. p. 17[1]; Bates, Trans. Ent. Soc. 1872, p. 219[2].

Hab. Mexico[1], Cordova, Juquila (*Sallé*); British Honduras, R. Sarstoon (*Blancaneaux*); Guatemala, Panzos (*Champion*); Nicaragua, Chontales (*Belt*[2], *Janson*).

BARYSSINUS.

Baryssinus, Bates, Ann. & Mag. Nat. Hist. ser. 3, xiii. p. 43 (1864).

Three species are known, all Tropical-American.

1. **Baryssinus bilineatus.** (Tab. XIII. fig. 1.)

Baryssinus bilineatus, Bates, Ann. & Mag. Nat. Hist. ser. 3, xiii. p. 44[1]; id. Trans. Ent. Soc. 1872, p. 218[2].

Hab. Guatemala, Teleman (*Champion*); Nicaragua, Chontales (*Belt*[2]).—South America, Amazons[1].

ŒDOPEZA.

Œdopeza, Serville, Ann. Soc. Ent. Fr. 1835, p. 88; Bates, Ann. & Mag. Nat. Hist. ser. 3, xiii. p. 145.

Eight species of this genus have been described, distinguished from *Nyssodrys* by facies and style of markings rather than by any constant and definite structural character. All are Tropical-American; one species is a common insect over a wide range.

1. Œdopeza pogonocheroides. (Tab. XIII. fig. 14.)

Œdopeza pogonocheroïdes, Serville, Ann. Soc. Ent. Fr. 1835, p. 88[1]; Bates, Ann. & Mag. Nat. Hist. ser. 3, xiii. p. 145[2]; id. Trans. Ent. Soc. 1872, p. 219[3].

Hab. Mexico, Playa Vicente (*Sallé*); British Honduras, Belize (*Blancaneaux*); Guatemala, Zapote, Panzos, El Reposo (*Champion*); Nicaragua, Chontales (*Belt*[3]).—South America, Cayenne[1], Amazons[2].

2. Œdopeza guttigera. (Tab. XIII. fig. 13.)

Œdopeza guttigera, Bates, Ann. & Mag. Nat. Hist. ser. 3, xiii. p. 147, nota[1]; id. Trans. Ent. Soc. 1872, p. 219[2].

Hab. Mexico[1], Cordova (*Sallé*); Nicaragua, Chontales (*Belt*[2]).

3. Œdopeza apicalis.

Œdopeza apicalis, Bates, Ann. & Mag. Nat. Hist. ser. 3, xiii. p. 147, nota[1].

Hab. Guatemala (*coll. Pascoe*[1]).

The description above cited was drawn up from a specimen in Mr. Pascoe's collection. The species has apparently not been met with by Mr. Champion; nor have I seen it from any other source.

4. Œdopeza incerta. (Tab. XII. fig. 9.)

Ovata, minus convexa, fusca, cinereo variegata guttisque numerosis obscurius fuscis; oculis lobo inferiore haud elongato; thorace lateribus mox pone medium tumidis postice sinuatim parum angustato; elytris oblique obtuse truncatis; antennis griseis fusco guttatis, articulis apice fuscis; femoribus subelongatis clavatis; mesosterno lato, quadrato.

Long. 3–3½ lin.

Hab. Nicaragua, Chontales (*Belt*).

I refer this species to *Œdopeza* with much hesitation. In colour and markings it lacks the chalky-white spots characteristic of the genus; and in structure it differs in the forehead being broader, with smaller and more rounded eyes, and by the pro- and mesosterna being both distinctly wider, the latter quadrate and not perceptibly narrowed behind. The femora, however, resemble those of *Œdopeza* in being pedunculated and rather strongly clavate. It is doubtful whether the female has an elongated ovipositor; the specimens before me may, however, be males.

TRYPANIDIUS.

Trypanidius, Thomson, Class. Long. p. 7.

Seven species of this genus have been described, all Tropical-American.

1. Trypanidius mexicanus. (Tab. XIII. fig. 11.)

Trypanidius mexicanus, Thomson, Class. Long. p. 8[1]; Bates, Trans. Ent. Soc. 1872, p. 219[2].

Hab. Mexico[1], Cordova (*Sallé*); Nicaragua, Chontales (*Belt*[2]).

Very closely allied to *T. dimidiatus* of South Brazil, and scarcely more than a local variety of it. No allied form, however, is known from the intervening countries.

2. **Trypanidius rubripes.** (Tab. XIII. fig. 10.)

Trypanidius rubripes, Bates, Trans. Ent. Soc. 1872, p. 219.

Hab. NICARAGUA, Chontales (*Belt*).

3. **Trypanidius melancholicus.** (*Trypanidius geminus*, Tab. XIII. fig. 12.)

Leiopus melancholicus, Serville, Ann. Soc. Ent. Fr. 1835, p. 87[1].

Trypanidius geminus, Pascoe, Trans. Ent. Soc. ser. 2, v. p. 29[2]; Bates, Trans. Ent. Soc. 1872, p. 238[3].

Hab. GUATEMALA, Panzos (*Champion*); NICARAGUA, Chontales (*Belt*[3]).—SOUTH AMERICA, Cayenne[1], Ecuador, Brazil[2].

Chontales specimens differ from the typical Cayenne form in the twin velvety spots of the elytra being confluent; in this they agree with examples taken by Buckley in Ecuador.

T. melancholicus differs from the other species of the genus in the considerably shorter forehead and lower lobe of the eyes.

CHÆTANES.

Chætanes, Bates, Ann. & Mag. Nat. Hist. ser. 3, xiii. p. 45 (1864).

The following is the only described species of this genus, which is very closely allied to *Trypanidius*, differing chiefly in its bristly surface and the presence of centro-basal tufts on the elytra, in which it resembles certain species of *Lophopæum*.

1. **Chætanes setiger.** (Tab. XII. fig. 8.)

Chætanes setiger, Bates, Ann. & Mag. Nat. Hist. ser. 3, xiii. p. 45[1]; id. Trans. Ent. Soc. 1872, p. 218[2].

Hab. NICARAGUA, Chontales[2] (*Belt*).—SOUTH AMERICA, Cayenne, Ecuador, Amazons[1].

ATRYPANIUS.

Atrypanius, Bates, Ann. & Mag. Nat. Hist. ser. 3, xiii. p. 47 (1864).

This genus has been incorporated with *Trypanidius* by Harold and Gemminger in the Munich catalogue; but I think it has an equal title to generic distinction to most other genera in this difficult group. Its differential characters, as I explained in founding the genus, lie chiefly in the plane mesosternum and the very short ovipositor. The elongated forehead and elongate-oblong lower lobes of the eyes and short basal joint of the hind tarsi it possesses in common with *Trypanidius*, and the broad mesosternum in common with *Nyssodrys*. The more convex species of *Nyssodrys* approach it very closely, the length and oblong shape of the lower lobe of the eyes being the chief point

of distinction; and even this shades off almost imperceptibly from species to species. In *Nyssodrys*, however, the ovipositor is always long, projecting beyond the tip of the elytra.

1. **Atrypanius conspersus.** (Tab. XIII. fig. 9.)

Lamia conspersa, Germar, Ins. Spec. Nov. p. 474[1].
Atrypanius conspersus, Bates, Ann. & Mag. Nat. Hist. ser. 3, xiii. p. 47[2].
Leiopus varipennis, Serville, Ann. Soc. Ent. Fr. 1835, p. 87[1].

Hab. MEXICO, Orizaba (*Sallé*); GUATEMALA, Zapote, San Juan (*Champion*); NICARAGUA, Chontales (*Belt*[2], *Janson*).—SOUTH AMERICA, Cayenne, Amazons, South Brazil[1].

2. **Atrypanius sedatus.**

Nyssodrys sedata, Bates, Ann. & Mag. Nat. Hist. ser. 3, xiii. p. 150[1].

Hab. MEXICO, Cordova (*Sallé*); GUATEMALA, San Gerónimo (*Champion*); NICARAGUA, Chontales (*Belt*); COSTA RICA (*Rogers*).—SOUTH AMERICA, Amazons[1].

In this and the following species the lower lobe of the eyes is rather less parallel-sided than in *A. conspersus*, although the lower end is truncated; but in two undescribed Brazilian species, very closely resembling *A. sedatus*, the eye is formed exactly as in the type of the genus. Nicaraguan specimens resemble those from the Amazons in their dark brown and tawny-brown colours; but a numerous series, taken by Mr. Champion at San Gerónimo, are much variegated with light grey and distinct tawny and blackish spots, approaching in this respect very remarkably *A. conspersus*. All the Mexican specimens, although similar to those of Nicaragua in colours, have a structural peculiarity in the apices of the elytra being so obliquely truncated that each elytron seems to terminate in a point.

3. **Atrypanius punctatellus.** (*Nyssodrys punctatella*, Tab. XIII. fig. 15.)

Nyssodrys punctatella, Trans. Ent. Soc. 1872, p. 219[1].

Hab. NICARAGUA, Chontales (*Belt*[1]); PANAMA (*Boucard*).

NYSSODRYS.

Nyssodrys, Bates, Ann. & Mag. Nat. Hist. ser. 3, xiii. p. 149.

In addition to the characters enumerated in my original definition of this genus, may be now mentioned the broad pro- and mesosterna, and the short, generally obtuse and often obsolete lateral spine of the thorax, which is distant from the hind angle and not separated from it by a deep sinuation of the sides. The ovipositor of the female in all the numerous species projects, generally to a moderate degree, beyond the apex of the elytra.

Nearly fifty species are known of this genus, which appears to be confined to the

tropical zone of America; at least Dr. Horn, in his recently published excellent revision of the Acanthocinini of the United States, does not mention the genus.

1. **Nyssodrys contempta.**

Nyssodrys contempta, Bates, Ann. & Mag. Nat. Hist. ser. 3, xiii. p. 152, nota[1]; Trans. Ent. Soc. 1872, p. 220[2].

Hab. Mexico[1], Tuxtla, Cordova (*Sallé*); Guatemala, San Gerónimo, Balheu, Panima, Chacoj (*Champion*); Nicaragua, Chontales (*Belt*[2], *Janson*); Costa Rica, Cache (*Rogers*).

Belongs to *Nyssodrys* on account of the considerably elongated ovipositor of the female; but the lower lobe of the eyes is as long relatively as in *Atrypanius*, with the difference that it is much narrowed below. A long subtriangular lobe seems to be the rule in the typical species of *Nyssodrys*; but the character has not much systematic importance.

2. **Nyssodrys caudata.**

Nyssodrys caudata, Bates, Ann. & Mag. Nat. Hist. ser. 3, xiii. p. 157[1]; id. Trans. Ent. Soc. 1872, p. 220[2].

Hab. Nicaragua, Chontales (*Belt*[2], *Janson*).—South America, Amazons[1].

3. **Nyssodrys deleta.** (Tab. XIII. fig. 16.)

Nyssodrys deleta, Bates, Ann. & Mag. Nat. Hist. ser. 3, xiii. p. 160[1]; id. Trans. Ent. Soc. 1872, p. 220[2].

Hab. Mexico, Cordova (*Sallé*); Guatemala, Panima (*Champion*); Nicaragua, Chontales (*Belt*[2]).—South America, Amazons[1].

This and the preceding belong to a numerous series of species which I consider as forming the typical group of *Nyssodrys*. They are of elongate, scarcely convex form, with gradually and only slightly thickened femora, long first tarsal joint of hind tarsi, very broad pro- and mesosterna, and possess in the females long projecting ovipositors. Most of the species are confined to the equatorial zone of South America.

4. **Nyssodrys binoculata.**

Nyssodrys binoculata, Bates, Ann. & Mag. Nat. Hist. ser. 3, xiii. p. 153[1].

Hab. Nicaragua, Chontales (*Belt*).—South America, Amazons[1].

A single specimen, taken by Mr. Belt, closely resembles the type (also unique) from the Amazons.

5. **Nyssodrys leucopyga.** (Tab. XIII. fig. 18.)

Nyssodrys leucopyga, Bates, Trans. Ent. Soc. 1872, p. 221[1].

Hab. Nicaragua, Chontales (*Belt*[1], *Janson*).

6. **Nyssodrys polyspila.**

Leiopus polyspilus, White, Cat. Long. Col. B. M. ii. p. 383 [1].

Hab. GUATEMALA, Panima (*Champion*); HONDURAS [1].

Allied to *N. vitticollis* (Amazons), from which it differs at once in the thorax having on its dorsal surface, instead of white stripes, rounded whitish spots, eight in number, arranged in two transverse rows.

7. **Nyssodrys pulverea.**

Oblongo-ovata, convexiuscula, ochraceo-cinerea, thoracis vittis dorsalibus duabus, scutello elytrorumque plaga transversa (nec suturam nec marginem attingente), macula prope scutellum, guttulis suturalibus liturisque prope apicem atro-fuscis; antennis rufo-piceis, articulis apice fuscis; oculis subtus haud elongatis; thorace mox pone medium utrinque angulato, lateribus antice et postice obliquis; elytris vix punctulatis, apice sinuatim truncatis angulo exteriore paullo producto; pedibus ochraceo-cinereis, tibiis apice tarsisque nigris, femoribus modice clavatis, tarsis posticis articulo primo modice elongato.

♀. Abdomen segmento apicale paullo ultra elytra prolongato, apice obtuso.

Hab. MEXICO, Cordova (*Sallé*).

8. **Nyssodrys lætifica.** (*Lepturges lætificus*, Tab. XII. fig. 19.)

Lepturges lætificus, Bates, Trans. Ent. Soc. 1872, p. 237.

Hab. NICARAGUA, Chontales (*Belt*).

The very considerable width of the mesosternum necessitates the removal of this and the three following species from the genus *Lepturges*, in which I had originally placed them, and to which they seem naturally to belong by their slender form and the style of their markings and coloration. The lateral spine of the thorax, always well developed in *Lepturges*, in *N. lætifica* is wanting. All the specimens taken by Mr. Belt appear to be males; at least none of them shows a trace of an ovipositor.

9. **Nyssodrys venusta.**

Lepturges venustus, Bates, Ann. & Mag. Nat. Hist. ser. 3, xii. p. 372 [1] (1863).

Hab. NICARAGUA, Chontales (*Belt*).—SOUTH AMERICA, Amazons [1].

A single example from Mr. Belt's collection agrees with specimens from the Amazons in every respect, except that the elongated black spots of the elytra parallel to the suture are joined together, and the posterior one is also joined to the sutural border. As the elytral spots are somewhat variable in the Amazonian examples, I have little hesitation in referring the Chontales insect to the same species.

10. **Nyssodrys circumscripta.** (*Lepturges circumscriptus*, Tab. XII. fig. 16.)

N. venustæ similis at brevior; grisea, antennis pedibusque atro-fuscis; supra griseo-ochracea, thorace vittis latis duabus, elytris vitta laterali alteraque ata subsuturali, maculam griseam medianam includente et ante apicem desinente atro-fuscis; thorace trapezoidali, lateribus fere rectis, pone spinam brevem exstantem

oblique (haud sinuatim) angustato, supra linea impressa, punctata, continua, juxta marginem posteriorem; elytris apice oblique obtuse truncatis; mesosterno latiusculo.
Long. 2 lin.

Hab. NICARAGUA, Chontales (*Belt*).

This and the preceding species differ from those described hitherto in the considerable width of the mesosternum, and in the longer interval between the eyes and the lower margin of the forehead. In other respects they accord very well in generic character with *Lepturges*.

11. **Nyssodrys calligramma.** (*Lepturges calligramma*, Tab. XIII. fig. 2, et var. Tab. XII. fig. 17.)

Lepturges calligramma, Bates, Trans. Ent. Soc. 1872, p. 217 [1].

Hab. MEXICO, Cordova (*Sallé*); GUATEMALA, Cerro Zunil (*Champion*); NICARAGUA, Chontales (*Belt* [1]).

The ovipositor of the female of this species scarcely projects beyond the apex of the elytra. Both the forms figured are from Chontales.

12. **Nyssodrys longula.**

Elongata, angusta, vix convexa, fusco-ochracea, elytris utrinque plagis duabus lateralibus (prima vix ante, secunda sat post medium) et scutello purpureo-fuscis velutinis, guttisque et maculis plurimis dorsalibus fuscescentibus; antennis nigris; thorace relative parvo, utroque latere paullo ante basin obtuse tumido; elytris valde elongatis, apice transversim flexuoso-truncatis, angulo exteriore producto, acuto; pedibus fusco-ochraceis, tibiis apice tarsisque nigricantibus; femoribus gradatim incrassatis.
Long. 3 lin. ♂.

Hab. COSTA RICA (*Dr. Horn*), coll. Bates.

One example, evidently a male, belonging to the same group as *N. calligramma*, *pulverea*, and *lætifica*, in which the external angle of the elytral truncature is produced and the scutellum clothed with black pile.

13. **Nyssodrys roseicollis.** (*Lepturges roseicollis*, Tab. XIV. fig. 4.)

Nyssodrys roseicollis, Bates, Trans. Ent. Soc. 1872, p. 221[1].

Hab. MEXICO, Cordova (*Sallé*); GUATEMALA, Cerro Zunil, Zapote, Dueñas, San Juan, Tamahu, San Gerónimo (*Champion*); NICARAGUA, Chontales (*Belt* [1]).

Mexican specimens differ from those of Guatemala and Chontales in the black spots of the thorax being united, forming a broad central belt. The specimen figured is from Dueñas.

14. **Nyssodrys polygramma.** (Tab. XIII. fig. 17.)

Nyssodrys polygramma, Bates, Trans. Ent. Soc. 1872, p. 220.

Hab. NICARAGUA, Chontales (*Belt*).

HYLETTUS.

Hylettus, Bates, Ann. & Mag. Nat. Hist. ser. 3, xiv. p. 11 ; Lacordaire, Gen. Col. ix. p. 787.

Lacordaire added to the characters which I published of this genus an important one derived from the presence of a cicatrice, narrow, but well defined, at the apex of the first joint of the antennæ. The species, which are of much larger size than those of the preceding genus, are four in number, all Tropical-American.

1. **Hylettus cœnobita.** (Tab. XIII. fig. 19.)

Leiopus cœnobita, Erichson, Wiegm. Archiv, i. p. 145 (1847 [1]).

Hylettus cœnobita, Bates, Ann. & Mag. Nat. Hist. ser. 3, xiv. p. 11 [2] ; id. Trans. Ent. Soc. 1872, p. 221 [3].

Hab. NICARAGUA, Chontales (*Belt* [3], *Janson*).—SOUTH AMERICA, Peru [1], Amazons [2].

ASTYNOMUS.

Astynomus, Castelnau, Hist. Nat. Ins. Col. ii. p. 463 (partim).

Ædilis, Serville, Ann. Soc. Ent. Fr. 1835, p. 32 (partim).

Astynomus, Thomson, Syst. Ceramb. p. 29 ; Lacordaire, Gen. Col. ix. p. 789.

As at present constituted this genus is confined to the Tropical-American fauna ; but its limits are not well defined, and many of the species approach closely the North-American genus *Urographis* recently described by Dr. Horn.

1. **Astynomus mucoreus.** (Tab. XIII. fig. 20.)

Astynomus mucoreus, Bates, Trans. Ent. Soc. 1872, p. 221 [1].

Hab. MEXICO, Cordova, Playa Vicente (*Sallé*) ; GUATEMALA, Teleman, El Zumbador, Panzos (*Champion*) ; NICARAGUA, Chontales (*Belt* [1], *Janson*).—SOUTH AMERICA, Colombia, Venezuela.

This species would perhaps be better placed in the allied genus *Toronœus*, its antennæ being much longer and more slender than in the typical *Astynomi* ; it differs, however, from *Toronœus* in having well-developed thoracic tubercles.

2. **Astynomus setiger.** (Tab. XIV. fig. 7.)

Astynomus setiger, Bates, Trans. Ent. Soc. 1872, p. 222 [1].

Hab. MEXICO, Playa Vicente (*Sallé*) ; GUATEMALA, Cerro Zunil, San Isidro, Las Mercedes, San Juan (*Champion*) ; NICARAGUA, Chontales (*Belt* [1]).

The antennæ in this and the following species are but little longer than the body in either sex, and perceptibly thicker than in *A. dorsalis* (the type of the genus). These features and the setose surface of the elytra bring them within the definition of the genus *Urographis*, from which, on the other hand, they differ much in the form of the thorax and in facies.

3. **Astynomus vexillaris.** (Tab. XIV. fig. 6.)

Astynomus vexillaris, Bates, Trans. Ent. Soc. 1872, p. 222 [1].

Hab. MEXICO, Cordova (*Sallé*); NICARAGUA, Chontales (*Belt* [1], *Janson*); PANAMA (*Boucard*).

4. **Astynomus picticauda.**

Oblongus, angustus, subconvexus, elytris breviter setosis granulis nonnullis asperatis; capite nigro, linea centrali vittaque infra oculos ochraceis; thorace parvo, tuberculo laterali conico acuto mox pone medium, dorso fusco et nigro-fusco variegato, guttulis dorsalibus alterisque lateralibus confluentibus ochraceis; scutello nigro-fusco; elytris apice breviter sinuato-truncatis, angulo exteriore paullo producto, supra inæqualibus punctatis basi et lineis dorsalibus granulatis—purpureo-fuscis nigro et ochraceo-guttatis, maculaque utrinque apicali nigro-fusca intus late ochraceo marginata; antennis utroque sexu quam corpus paullo longioribus modice robustis, fere nudis, rufo-piceis, articulis apice nigro-fuscis, basi pallidis; corpore subtus ochraceo, mesosterno latiusculo; pedibus ochraceis, femoribus et tibiis nigro biannulatis; tarsis nigris, articulo basali ochraceo.

♂. Abdominis segmento apicali lamina dorsali semicirculariter emarginata, ventrali obtuse minus sinuata.

♀. Ovipositor sat elongatus, valvula dorsali acuta marginata medio sulcata, ventrali obtuse leviter emarginata.

Long. 4½–5 lin. ♂ ♀.

Hab. GUATEMALA, Cerro Zunil (*Champion*).

This prettily marked species accords in the generic characters at present accepted neither with *Astynomus* nor *Urographis*. In its general form, however, it resembles the typical species of the former genus much more closely than any other of this perplexing group. If it be thought desirable to separate it generically, the following two species will have to be associated with it.

5. **Astynomus nigropunctatus.**

A. picticaudæ simillimus, differt præcipue signaturis elytrorum. Oblongus, angustus, setosus; capite thoraceque ut in *A. picticauda*; elytris griseo- vel purpureo-fuscis nigro et griseo-ochraceo punctatis, fascia post medium nigro-fusca, altera dentata paullo ante apicem cinereo-ochracea maculaque apicali ejusdem coloris; antennis, pedibus et abdominis structura ut in *A. picticauda*.

Long. 3¾–6 lin. ♂ ♀.

Hab. MEXICO, Cordova (*Sallé*); GUATEMALA, Sinanja, Purula (*Champion*).

The Mexican examples differ from those of Guatemala in the less contrasted colours of their markings, the ochraceous hue of their spots and fasciæ being replaced by ashy grey; but the position and shape of the spots are almost identical. I have adopted for the species the MS. name given by M. Chevrolat in the Sallé collection.

6. **Astynomus tenebrosus.**

Latius oblongus, convexus, cinerascenti-niger, breviter setosus, elytris fascia lata ante apicem nigra antice cinereo-albo marginata liturisque cinereis prope apicem; capite omnino cinereo-nigro; thorace quam elytra multo angustiore sed transverso, tuberculo laterali apud medium sito, validissimo, antrorsum paullo spectante, dorso tuberoso valde inæquali, nigro, macula utrinque cinerea nigro punctata; elytris latius oblongis, dorso inæqualibus aspere granulatis et punctatis tuberibus centro-basalibus elevatis, apice sinuato-truncatis, angulis suturali et exteriore æqualiter leviter productis; antennis (♀) modice robustis, quam

corpus paullulum longioribus, nigris, articulis 3°–6ᵐ basi cinereis ; corpore subtus et pedibus griseo-nigris, femoribus tibiisque annulis, tarsorum articulo primo cinereis.

♀. Ovipositor sat elongatus, valvula dorsali marginata, supra obsolete sulcata, ventrali apice emarginata lobis subobtusis.

Long. 6½ lin. ♀ (excl. ovipos.).

Hab. GUATEMALA, Totonicapam (*Champion*).

7. **Astynomus decorus.**

Præcedentibus similis, sed differt elytris utrinque supra epipleuras obtuse carinatis. Elongato-oblongus, convexus, lateraliter compressus, grisescenti-niger, nigro punctatus ; elytris setosis, supra inæqualibus, asperato-punctatis, utrinque maculis angulatis quatuor nigro-velutinis ochraceo marginatis (prima haud procul a scutello, suturali, communi, 2ª ante, 3ª post medium, discoidalibus, quartaque transversa prope apicem), apice transversim truncatis, angulo exteriore paullo producto ; capite angusto, vertice maculis duabus atro-velutinis ; thorace tuberculo laterali mox pone medium valido, recte exstante, dorso convexo, inæquali, nigro quadrimaculato maculis ochraceo marginatis ; antennis (♀) modice robustis, quam corpus fere dimidio longioribus, nigris, articulis 3°–6ᵐ basi cinereis ; pedibus nigris, cinereo piperitis.

♀. Ovipositor valde elongatus (nigro et cinereo-piperitus), lamina dorsali acuta, medio sulcata, ventrali profunde fissa.

Long. 7 lin. ♀ (excl. ovipos.).

Hab. GUATEMALA (*Sallé*).

The lateral carina of the elytra taken alone would necessitate the location of this species in the genus *Eutrypanus* ; but all its other characters are those of *Astynomus*, and the length of the ovipositor and its cleft lower valve are unlike any thing known in *Eutrypanus*. In its form and markings it most resembles *A. melanophilus* (Chev.) of Venezuela ; but it is much darker in colours. I have adopted the MS. name given to it in the Sallé collection.

OLENOSUS.

Olenosus, Bates, Trans. Ent. Soc. 1872, p. 205.

The male only was known when I drew up the characters of this genus ; since then, having seen the female, and found that it has an elongated ovipositor differing very little in relative length and shape from the same organ in *Acanthocinus*, it has become necessary to remove the genus from the neighbourhood of *Oreodera*, where it was originally placed, into that of *Acanthocinus* and *Astynomus*. It is amply distinguished from both genera by its strongly clavate antennal scape and the long and denticulated anterior tibiæ of the male. The sternums, both of the pro- and mesothorax, are much narrower between the coxæ than in the allied genera, and approach in form the same parts in *Leiopus* and *Lepturges*.

1. **Olenosus serrimanus.** (Tab. X. fig. 13 ♂, 14 ♀.)

Olenosus serrimanus, Bates, Trans. Ent. Soc. 1872, p. 206[1].

Hab. MEXICO, Orizaba, Cordova (*Sallé*) ; GUATEMALA, San Gerónimo (*Champion*) ; NICARAGUA, Chontales (*Belt* [1]).

CARPHINA.

Carphina, Bates, Trans. Ent. Soc. 1872, p. 223.

Four species are known, all Tropical-American. With this commences a series of genera of Acanthocinini distinguished from all the preceding by their laterally compressed, generally elongate forms, in which the elytra are furnished with lateral carinæ, separating the dorsal surface from the vertical epipleuræ.

1. **Carphina arcifera.** (Tab. XIV. fig. 8.)

Carphina arcifera, Bates, Trans. Ent. Soc. 1872, p. 223[1].

Hab. MEXICO, Orizaba (*Sallé*); GUATEMALA, El Reposo (*Champion*); NICARAGUA, Chontales (*Belt* [1], *Janson*).

SYMPLEUROTIS.

Corpore ut in *Synchyzopo* et *Colobothea* elongatum, lateraliter compressum; supra inæquale, setosum. Caput angustum, frons elongata; oculi parvi, subtenuiter granulati. Antennæ (♂) corpore fere dimidio longiores, quam in *Carterica* robustiores, vix setosæ, scapo modice elongato, versus apicem gradatim clavato, articulo tertio quam scapus paullulum longiore, 4°–11^{m} gradatim decrescentibus. Thorax subcylindricus, inermis, antice leviter rotundatus, post medium angustatus, dorso anteriore bituberoso. Elytra thorace multo angustiora, parallela, apice recte truncata angulo exteriore spinoso; supra utrinque carinata, humeris prominulis, tuberculis centro-basalibus modice elevatis, deinde dorso subplanato, postice declivia. Prosternum sat latum, mesosternum latum quadratum. Pedes modice elongati; femora subito clavata; tarsi posteriores elongati, articulo primo quam duo sequentes longiore. Abdominis (♂) segmentum apicale elongatum, lamina ventrali modice, dorsali valde emarginata, hac angulis prolongatis acutis.

The insect for which this new genus is instituted bears no resemblance in facies or markings to any of the numerous species of *Colobothea*, *Synchyzopus*, and *Carterica*, which it approaches in its elongate and laterally-compressed form. The form of the thorax is also peculiar, but bears some resemblance to that of *Synchyzopus histrio*, excepting its tuberose surface.

1. **Sympleurotis rudis.**

Fusco-olivacea, fulvo obscure variegata et cinereo nigroque guttata; scutello nigro, linea mediana cinerea; elytris post medium fasciola indistincta obliqua nigro-fusca, antice cinereo marginata; antennis nigris, articulis basi griseis; pedibus piceis fusco-pubescentibus, tibiis apice tarsisque nigris; corpore subtus fusco incumbenti-pubescente.

Long. 4–4½ lin.

Hab. MEXICO, Juquila (*Sallé*); GUATEMALA, Capetillo (*Champion*).

The single Mexican specimen is less strongly marked both in colour and size of its tubercles; the above description is drawn chiefly from two examples from Guatemala.

SYNCHYZOPUS.

Synchyzopus, Thomson, Syst. Ceramb. p. 29.
Colobothea (partim), Perty, Del. Anim. Art. Bras. p. 97.

Three species of this genus have been described; but many others exist unpublished in collections, all remarkable for the varied and elegant style of their markings. The genus appears to be confined to Tropical America.

1. **Synchyzopus geometricus.** (*Carterica geometrica*, Tab. XIV. fig. 9.)

Synchyzopus geometricus, Bates, Trans. Ent. Soc. 1872, p. 224[1].

Hab. NICARAGUA, Chontales (*Belt*[1], *Janson*).

CARTERICA.

Carterica, Thomson, Class. Long. p. 19 (1860); Lacordaire, Gen. Col. ix. p. 827.

Six species have been described, all Tropical-American.

1. **Carterica optata.**

Carterica optata, Pascoe, Trans. Ent. Soc. ser. 3, v. p. 284[1].

Hab. GUATEMALA, Panzos (*Champion*).—SOUTH AMERICA, Colombia[1].

This species differs from the type forms of *Carterica* in its shorter antennal scape and in its elytra tapering towards the extremity instead of being parallel or slightly dilated towards the apex. In these respects it accords better with *Synchyzopus*. The terminal abdominal segment in the male is remarkably elongated and deflexed, with cleft apex of the dorsal plate, and the large side pieces of the genital apparatus protruding between this and the ventral plate. The dorsal plate in the typical species *C. cinctipennis* is also notched, but in a much lesser degree.

2. **Carterica pygmæa.**

Carterica cincticornis (Bates), var., Bates, Trans. Ent. Soc. 1872, p. 238 (nec *C. cincticornis,* Bates, Ann. & Mag. N. H. ser. 3, xv. p. 214).

C. cincticorni affinissima, at differt certe elytrorum carina laterali incrassata integra, necnon coloribus. Parva, paullo convexa, setosa, nigra; capite thoraceque fulvis, vitta lata nigra utrinque ab oculi margine usque ad mesosternum ducta alteraque dorsali thoracis; elytris nigris, vitta utrinque laterali lata fulva a basi usque ultra medium extensa; antennis nigris, articulis 4°–8ᵐ albo-testaceis, apice nigris, scapo longissimo; femoribus basi fulvo-testaceis; thorace trapezoidali angulis posticis acutis; elytris postice leviter rotundato-dilatatis, apice apud suturam oblique truncatis, extus sinuatis, angulo exteriore producto acuto, quasi utrinque bidentatis, dorso crebre punctatis, carina dorsali, altera incrassata integra laterali, epipleuris angustissimis.

Long. 2 lin.

Hab. NICARAGUA, Chontales (*Belt*).

This species and *C. cincticornis* approach very nearly the genus *Sparna* (Thomson). I doubt, however, whether this will eventually prove distinct from *Carterica*.

PRISCILLA.

Priscilla, Thomson, Syst. Ceramb. p. 30.

The following is the only known species:—

1. **Priscilla hypsiomoides.** (Tab. XIV. fig. 10.)

Priscilla hypsiomoides, Thomson, Syst. Ceramb. p. 31 (1864)[1].

Colobothea dioptica, Bates, Ann. & Mag. Nat. Hist. ser. 3, xv. p. 220[2] (1865); id. Trans. Ent. Soc. 1872, p. 224[3].

Hab. Nicaragua, Chontales (*Belt* [3]).—South America, Cayenne [1], Amazons [2].

COLOBOTHEA.

Colobothea, Serville, Encycl. Méth. x. p. 336 (1825); Ann. Soc. Ent. Fr. 1835, p. 69; Bates, Ann. & Mag. Nat. Hist. ser. 3, xv. p. 214.

Seventy species of this highly characteristic Tropical-American form of Lamiid Longicorns have been described. They are far more numerous and varied in Equatorial South America than in the northern part of the Neotropical zone; and none appear to be found in the West-India Islands, or in the pampa region south of Brazil. The genus belongs to the Acanthocinini group in all essential points of structure, differing chiefly in its elongate and laterally-compressed shape of body, the tendency to this modification of form exhibited in many of the genera allied to *Astynomus* here reaching its acme. The high epipleuræ of the elytra are always limited above by a distinct elevated line or carina. The species are all of medium or large size, and prettily varied with tomentose spots or bands.

1. **Colobothea ramosa.** (Tab. XIV. fig. 12.)

Colobothea ramosa, Bates, Trans. Ent. Soc. 1872, p. 225.

Hab. Nicaragua, Chontales (*Belt*).

In the description above cited the form of the terminal abdominal segment is erroneously described, owing to my having mistaken a bifid process forming part of the genital organs as the end of the dorsal plate. The parts are nearly hidden by hairs, rendering it difficult to ascertain the real shape. As several species, closely allied in the ashy-white macular tomentose patches of the elytra, are distinguishable chiefly by the form of this segment in the two sexes, I add here an amended description.

♂. Abdominis segmentum apicale elongatum, lamina dorsali convexa, apice paullo angustata et emarginata; lamina ventrali quadrata, medio concava, apice late triangulariter emarginata, angulis elevatis productis sublobatis.

♀. Abdominis segmentum apicale subconicum, lamina dorsali plana, apice obtusa, medio sat profunde incisa, ventrali apice late emarginato-truncata angulis acutis.

2. **Colobothea leucophæa.**

Colobothea leucophæa, Bates, Ann. & Mag. Nat. Hist. ser. 3, xvi. p. 223, nota [1].

Hab. Mexico [1], Cordova, Playa Vicente, Juquila (*Sallé*).

♂. Abdominis segmentum apicale latissimum, difforme, lamina ventrali angulis valde productis, lobiformibus, elevatis, apice medio paullulum elevata; lamina dorsali convexa, angustata, apice medio leviter emarginata.

♀. Abdominis segmentum apicale subconicum, lamina dorsali plana, apicem versus declivi, apice fere integra, ventrali apice late emarginato-truncata angulis acutis productis.

3. **Colobothea guatemalena.**

C. leucophæa et *ramosæ* proxime affinis et simillima; capitis thoracisque signaturis similibus (sed thoracis lineola alba utrinque laterali medio interrupta), elytrorumque guttis cinereo-albis minus compactis et magis diffusis: differt

♂. Abdominis segmentum apicale incrassatum, lamina dorsali convexa, apice emarginato-truncata angulis obtusis, ventrali convexa, apicem versus fere verticaliter declivi, angulis productis (sed haud elevatis), intus curvatis, hirsutis.

♀. Abdominis segmentum apicale subconicum, lamina dorsali plana vel concava, apice triangulariter late emarginata, ventrali apice late truncata angulis elongatis spiniformibus.

Long. $5\frac{1}{4}$–7 lin. ♂ ♀.

Hab. Guatemala, Zapote, Paraiso, El Reposo (*Champion*).

4. **Colobothea regularis.**

Præcedentibus affinis et similis, sed differt primo intuitu thorace cinereo quadrivittato. Griseo-nigra, vertice vittis duabus, thoraceque vittis quatuor (subæqualiter separatis) et pleuris cinereo-albis; elytris fasciis tribus latis dilaceratis e tomento cinereo crebre nigro-guttata, per vittam suturalem connexis, fasciisque tribus cinereo-nigris, apice cinereo-albo notato; antennis rufo-piceis, articulis basi cinereis.

♀. Abdominis segmentum apicale subconicum, lamina dorsali apicem versus rotundato-angustata, apice profunde triangulariter incisa, ventrali late triangulariter emarginata angulis acutis sed haud spinosis.

Long. 7–$7\frac{1}{2}$ lin. ♀.

Hab. Mexico, Cordova (*Sallé*).

I have adopted the MS. name given to this distinct species of the *leucophæa* group by M. Chevrolat in the Sallé collection. It differs from the three preceding species not only by the separation of the central dorsal vitta of the thorax into two widely separated stripes and the different structure of the sheath of the female ovipositor, but by the macular ashy belts of the elytra being all followed by belts of equal width of the griseous-black ground-colour.

5. **Colobothea vidua.**

Colobothea vidua, Bates, Ann. & Mag. Nat. Hist. ser. 3, xvi. p. 224, nota [1].

Hab. Mexico [1], Cordova (*Sallé*); Guatemala, San Gerónimo, San Juan, Chacoj (*Champion*).

6. **Colobothea chontalensis.** (Tab. XIV. fig. 11.)

Colobothea chontalensis, Bates, Trans. Ent. Soc. 1872, p. 225.

Hab. Nicaragua, Chontales (*Belt*).

7. **Colobothea hebraica.** (Tab. XIV. fig. 13.)

Colobothea hebraica, Bates, Ann. & Mag. Nat. Hist. ser. 3, xvi. p. 108, nota [1]; Trans. Ent. Soc. 1872, p. 225 [2].

Hab. Mexico [1], Cordova, Playa Vicente (*Sallé*); Guatemala, Izabal (*Sallé*), Chacoj, El Reposo (*Champion*); Nicaragua, Chontales (*Belt* [2]).

Chontales examples differ constantly from those of Mexico and Guatemala in the nearer approximation of the two cinereous lineoles of the base of the thorax; but the apical abdominal segment is of the same shape. In this species both dorsal and ventral plates are simple in both sexes.

8. **Colobothea unilineata.** (Tab. XIV. fig. 14.)

Colobothea unilineata, Bates, Trans. Ent. Soc. 1872, p. 225.

Hab. Nicaragua, Chontales (*Belt*).

9. **Colobothea dispersa.** (Tab. XIV. fig. 15.)

Colobothea dispersa, Bates, Trans. Ent. Soc. 1872, p. 226 [1].

Hab. Nicaragua, Chontales (*Belt* [1]); Panama (*Boucard*).—South America, Colombia.

10. **Colobothea parcens.**

C. dispersæ similis, at differt thoracis lineis duabus dorsalibus approximatis subparallelis, etc. Quoad formam *C. guatemalencæ* affinis, thorace prope basin paullo angustato lateribus (♂) rotundatis; griseo-nigra, vertice vittis duabus, thorace vittis duabus medianis fere paralleiis et linea distanti utrinque laterali, elytris guttis paucis versus basin, medium et apicem paullo agglomeratis, apiceque macula difformi cinereo-albis; subtus cinereo-nigra, vitta lata cinereo-alba ab oculo usque ad abdominis apicem ducta.

♂. Abdominis segmentum apicale modice elongatum, versus apicem angustatum, lamina dorsali apice obtusa leviter emarginata, ventrali versus apicem concava, apice late profunde emarginata, angulis productis.

♀. Abdominis segmentum apicale subconicum, lamina dorsali apice minute incisa, ventrali truncata.

Long. $5\frac{1}{2}$–6 lin. ♂ ♀.

Hab. Mexico, Cordova (*Sallé*).—Guatemala, Sabo (*Champion*).

11. **Colobothea distincta.** (Tab. XIV. fig. 16.)

Colobothea distincta, Pascoe, Trans. Ent. Soc. ser. 3, v. p. 284 [1]; Bates, Trans. Ent. Soc. 1872, p. 226 [2].

Hab. Guatemala, Cerro Zunil, Las Mercedes (*Champion*); Nicaragua, Chontales (*Belt* [2]); Costa Rica (*Sallé*).—South America, Colombia [1].

12. **Colobothea bitincta.** (Tab. XIV. fig. 17.)

Colobothea bitincta, Bates, Trans. Ent. Soc. 1872, p. 226 [1].

Hab. Nicaragua, Chontales (*Belt* [1], *Janson*).

CARNEADES.

Carneades, Bates, Trans. Ent. Soc. 1869, p. 387; *Colobothea*, Thomson (partim), Class. Long. p. 21.

Five species of this genus have been described, peculiar (like *Colobothea*) to Tropical America. It is distinguished from *Colobothea* chiefly by the antennal scape being abruptly clavate.

1. **Carneades superba.** (Tab. XIV. fig. 18.)

Carneades superba, Bates, Trans. Ent. Soc. 1869, p. 387[1].

Hab. NICARAGUA, Chontales (*Belt*[1], *Janson*).

2. **Carneades delicia.**

Carneades delicia, Bates, Trans. Ent. Soc. 1869, p. 387.

Hab. NICARAGUA, Chontales (*Belt*).

3. **Carneades grandis.**

Colobothea grandis, Thomson, Class. Long. p. 21[1].

Hab. MEXICO[1], Cordova (*Sallé*); BRITISH HONDURAS (*Blancaneaux*).

4. **Carneades hemileuca.** (Tab. XIV. fig. 19.)

Griseo-nigra, vertice linea mediana, thorace vitta dorsali (postice dilatata), elytrisque plaga magna communi quadriloba basali, fascia lata post medium multisinuata, et macula parva apicali juxta suturam cretaceis; subtus vitta lata utrinque ab oculum usque ad metasterni apicem ducta, maculisque lateralibus ventris (segmento primo excepto) cretaceis; capite angusto, fronte valde elongata, tuberibus antenniferis antice tumidis; antennis (♀) brevibus, scapo apice clavato velutino, infra hirsuto, articulo 2° dilatato, 3°–7^{m} apice paullo incrassatis (basi griseo-albis), 8°–11^{m} brevissimis; elytris oblongo-elongatis, apice recte truncatis extus spinosis, humeris prominulis vix obliquis usque ad basin et postice versus discum carinatis, epipleuris obsolete carinatis; supra versus basin sparsim (postice lineatim) asperato-punctatis; pedibus nigris, tibiis annulo mediano, tarsis articulo primo griseis.

Long. 8 lin. ♀.

Hab. COSTA RICA, Cache (*Rogers*).

5. **Carneades princeps.** (Tab. XIV. fig. 20.)

Carneades princeps, Bates, Trans. Ent. Soc. 1872, p. 238.

Hab. NICARAGUA, Chontales (*Belt*).

APECHTHES.

Apechthes, Thomson, Class. Long. p. 362.

In this genus the peculiarities which distinguish *Colobothea* from the other Acanthocinini are carried a step further, the lateral compression of the body and the carinæ of the elytra being here still more strongly pronounced; and, in addition, the elytra and

antennæ are ornamented with crests and tufts of hair. One species only, from Mexico and Guatemala, has been as yet described; to this Mr. Champion has added a second, very distinct in its markings, from Guatemala.

1. **Apechthes mexicanus.**

Apechthes mexicanus, Thomson, Class. Long. p. 363[1].

Hab. Mexico[1], Cordova (*Sallé*); Guatemala, Las Mercedes, Cerro Zunil (*Champion*).

2. **Apechthes championi.**

Niger, longe cano-hirsutus, corpore griseo-tomentoso guttis miniaceis et nigris passim ornato; thorace subcylindrico, dorso bituberoso; elytris postice minus attenuatis, apice recte truncatis, angulo exteriore spinoso; supra carina dorsali abbreviata, altera acuta laterali ante apicem terminata, crista centro-basali dense nigro-penicillata fasciculoque minore discoidali post medium; antennis nigris, infra longe ciliatis, articulis 8° et 9° infra dense nigro-penicillatis.

Long. 4–4$\frac{1}{4}$ lin.

Hab. Guatemala, San Gerónimo (*Champion*).

Group **TAPEININI.**

This group, equivalent to the "Groupe Tapeinitæ" of M. Thomson, is retained, provisionally, for the anomalous genus *Tapeina*, the true position and affinities of which it is difficult to determine. M. Thomson, in his 'Systema Cerambycidarum,' in 1864, placed it at the end of the Lamiidæ, after the Saperdini; and in my review of the Longicorn Coleoptera of the Amazons, in 1866, I treated it as a separate group having affinity with the Desmiphorini and Exocentrini, stating that these curious insects appeared to be "abnormally flattened Exocentrinæ." Lacordaire, in the ninth volume of his 'Genera,' in 1872, disagreeing with these views regarding their affinities, placed them as a Groupe Tapeinitæ among a series of Old-World forms, and in close connexion with *Enotes* and *Enicodes*, forms peculiar to New Caledonia, with which, indeed, they agree in their chief structural characters. I am now inclined to doubt that *Tapeina* has any close affinity with the Exocentrini, the anterior acetabular sutures being less tightly closed than they are in the true members of that group; and I think their true place is near *Eupogonius* and allies in the Desmiphorini.

TAPEINA.

Tapeina, Serville, Encycl. Méthod. x. p. 545 (1825); Thomson, Arch. Ent. i. p. 39; Bates, Ann. & Mag. Nat. Hist. ser. 3, xvii. p. 196; Lacordaire, Gen. Col. ix. p. 489.

The genus is peculiar to Tropical America. Four species are known, of which the following is the only one occurring in Central America.

1. **Tapeina transversifrons.**

Tapeina transversifrons, Thomson, Arch. Ent. p. 44, t. 7. f. 3[1]; Bates, Trans. Ent. Soc. 1872, p. 199[2].

Hab. Mexico [1], Cordova (*Sallé*); British Honduras, river Sarstoon (*Blancaneaux*); Guatemala, Teleman, Chacoj (*Champion*); Nicaragua, Chontales (*Belt*[2], *Janson*).

Group **HEBESTOLINI.**

This group corresponds with Lacordaire's "Groupe" Hébestolides. It forms the connecting link between such genera as *Estola* among the Pogonocherini and the Phytœciini, having the toothed tarsal claws of the latter and all the other characters and facies of the former. According to Lacordaire, the Hebestolini are distinguished from the other groups having toothed tarsal claws by the closure of their intermediate acetabula. This is a character of extremely doubtful application; and the difference in the form of the acetabula between *Eumathes* of this group and *Drycothea* of the group Calliinæ is so slight that, the great resemblance between the species of the two being considered, it seems in the highest degree artificial to place the two genera in separate groups.

EUMATHES.

Eumathes, Pascoe, Journal of Entom. i. p. 354; Bates, Ann. & Mag. Nat. Hist. ser. 3, xvii. p. 296; Lacordaire, Gen. Col. ix. p. 914.

Four species of this genus have been described, all Tropical-American.

1. **Eumathes cuprascens.** (Tab. XV. fig. 17.)

Eumathes cuprascens, Bates, Trans. Ent. Soc. 1873, p. 233.

Hab. Nicaragua, Chontales (*Belt*).

The middle acetabula are slightly more open externally than in *Eumathes undatus*, and, in fact, are of the same form as in *Drycothea sallei*. This species ought therefore, according to Lacordaire's views, to be removed from the Hebestolini to the Calliini group. But, on the other hand, the middle tibiæ are notched and grooved, and the mesosternum convex and keeled, as in *Eumathes*.

CYMATONYCHA.

Cymatonycha, Bates, Trans. Ent. Soc. 1873, p. 234.

The following is the only known species. The tarsal claws in this genus have only a rudiment of dentiform projection at their base.

1. **Cymatonycha castanea.** (Tab. XV. fig. 13.)

Cymatonycha castanea, Bates, Trans. Ent. Soc. 1873, p. 234[1].

Hab. GUATEMALA, Chacoj (*Champion*); NICARAGUA, Chontales (*Belt*[1]).

Group **CALLIINI.**

I adopt this group from Lacordaire's arrangement, but should be disposed to modify it by transferring to it *Eumathes* from the group Hebestolini. With tarsal claws similar to those of *Oberea* and a number of other genera belonging to the old subfamily Saperdinæ, it differs in its totally different facies, owing to the short and generally ovate forms of its species, and the thorax being ovate, with most frequently a distinct lateral tubercle.

DRYCOTHEA.

Drycothea, Thomson, Physis, ii. p. 145; Lacordaire, Gen. Col. ix. p. 908.

One Mexican species only has been described. Others have been discovered by Champion in Guatemala, and are apparently common insects; so that it is probable the genus is a numerous one in Central America.

1. **Drycothea sallæi.**

Drycothea sallei, Thomson, Physis, ii. p. 145[1].

Hab. MEXICO, Teapa[1], Toxpam, Playa Vicente, Cordova (*Sallé*).

2. **Drycothea stictica.**

Estolæ perforatæ simillima, sed antennis brevioribus. Elongata, breviter setosa, ochraceo-fusca, elytris maculis parvis irregularibus (plerumque transversis) passim variegatis, antennis pedibusque griseo-nigris, illis articulis basi griseis; thorace utrinque tuberculo laterali parvo acuto, dorso sparsim grosse punctato; elytris usque ad apicem striato-punctatis, interstitiis hic illic paullo elevatis, apice singulatim obtuse rotundatis; antennis robustis, ciliatis, corpore vix longioribus; mesosterno valde convexo, haud carinato.
Long. $3\frac{1}{2}$–$5\frac{1}{2}$ lin.

Hab. GUATEMALA, Cahabon, Cerro Zunil, San Isidro, Zapote, San Gerónimo, San Juan (*Champion*).

The dusky spots and specks of the elytra are much fainter in some examples than in others, and occasionally are quite wanting.

3. **Drycothea testaceipes.**

Fusca, griseo-fusco tomentosa, femoribus plus minusve flavo-testaceis; antennarum articulis basi griseis; thorace subcrebre punctulato; elytris punctato-striatis, punctis solum fuscis.
Long. $2\frac{1}{2}$–4 lin.

Hab. GUATEMALA, Cerro Zunil, El Zumbador (*Champion*).

Closely allied to *D. stictica*, but smaller, and clothed with uniform ashy-brown pubescence, varied only by the darker punctures. The thorax is also rather more finely and closely punctured; and the femora are of a pale testaceous-yellow colour. The last-mentioned feature is somewhat variable; in some examples the femora are wholly pale, with the exception of the tips; in others the upper and lower edges are dusky as well as the tips.

4. **Drycothea cribrata.**

Parva, nigro-fusca, lineolis vel lituris parvis fulvis sparsim variegata; thorace crebre grosse punctato; elytris setis incumbentibus rigidis vestitis, confluenter crebre punctatis; antennis robustis, articulo tertio quam scapum multo longiore, 4° 6° basi griseis, 8° toto 10° basi testaceis.

Long. $2\frac{3}{4}$ lin.

Hab. GUATEMALA, Teleman (*Champion*).

The thoracic spine, though distinct, is not so long and acute as in *D. stictica*. The elytra are thickly punctured throughout, and the punctures often confluent; but, with the exception of the sutural stria, there is little tendency to linear arrangement as in the other species. The mesosternum is not prominent, but slightly concave in the middle.

ASEMOLEA.

Gen. *Drycotheæ* proxime affine, differt præcipue thorace haud armato, rotundato. Corpus breve, subcylindricum, longe dense setosum. Caput insertum; frons brevis, infra oculos obtusa, angustata. Thorax parvus, lateribus medio rotundatis. Elytra apice obtusa, lineatim punctata. Mesosternum paullo convexum. Ungues intus basi valde unidentati. Antennæ corpore breviores, robustæ, apice acutæ, infra setosæ.

1. **Asemolea setosa.**

Obscure fusca, subnitida, tomento cinereo-fulvo plagiatim vestita; corpore supra toto antennisque infra longe setosis; thorace grosse discrete punctato, linea dorsali fulva impunctata; scutello fulvo.

Long. $2\frac{1}{2}$–$3\frac{1}{4}$ lin.

Hab. GUATEMALA, Zapote, Las Mercedes, San Isidro, El Zumbador (*Champion*).

2. **Asemolea crassicornis.**

Cinereo-fulva, cinereo indistincte maculata, passim setosa; thorace grosse disperse, elytris sublineatim punctatis; antennis quam corporis dimidium vix longioribus, paullo incrassatis.

Long. $2\frac{1}{2}$ lin.

Hab. MEXICO, Cordova (*Sallé*).

CALLIA.

Callia, Serville, Ann. Soc. Ent. Fr. 1835, p. 60; Lacordaire, Gen. Col. ix. p. 908.

Fourteen species of this genus are known, all Tropical-American. A fifteenth has been added from Lifu Island, near New Caledonia. We may be permitted to doubt if this really belongs to the genus.

1. **Callia fulvocincta.** (Tab. XV. fig. 19.)

Callia fulvocincta, Bates, Ann. & Mag. Nat. Hist. ser. 3, xvii. p. 300[1]; id. Trans. Ent. Soc. 1872, p. 238[2].

Hab. Mexico (*Sallé*); Guatemala, Teleman, Chacoj (*Champion*); Nicaragua, Chontales (*Belt*[2], *Janson*).—South America, Amazons [1].

2. **Callia minuta.**

Callia minuta, Bates, Trans. Ent. Soc. 1872, p. 238.

Hab. Nicaragua, Chontales (*Belt*).

Group **TETRAOPINI.**

This group forms a natural assemblage of genera, distinguished by the obliteration of the connexion between the lobes of the eyes and the consequent existence of two eyes on each side of the head. The tarsal claws in the majority of the genera have a tooth at their base; but in others they are fissile. The group is equivalent to Lacordaire's "Groupe II." of his "Phytæciides vraies," and is distributed over the warmer parts of America, Africa, and Asia, being least numerous in Africa, and having one representative in Europe.

PHÆA.

Phæa, Newman, Entomologist, p. 13; Lacordaire, Gen. Col. ix. p. 878.
Lamprocleptes, Thomson, Archiv. Entom. i. p. 64.

Twenty-six species of this genus, including those here described, are known, all from Mexico and Central America and the regions immediately adjacent.

1. **Phæa saperda.**

Phæa saperda, Newman, Entomologist, p. 14[1].
Lamprocleptes entomologorum, Thomson, Archiv. Entom. i. p. 65.

Hab. Mexico [1], Cordova, Playa Vicente (*Sallé*), Cerro de Plumas (*Höge*); Guatemala, Pancina, San Juan (*Champion*).

Guatemala examples have a much narrower red belt at the base of the elytra than those from Mexico; and in one specimen the elytra are entirely black.

2. **Phæa scuticollis.**

Phæa scuticollis, Bates, Trans. Ent. Soc. 1872, p. 227.

Hab. Nicaragua, Chontales (*Belt*).

3. **Phæa acromela.**

Phæa acromela, Pascoe, Trans. Ent. Soc. ser. 2, iv. p. 256[1].

Hab. Mexico [1], Cordova (*Sallé*), Almolonga (*Höge*); Guatemala, Zapote, San Juan (*Champion*).

This common species varies in length from 3 to 6 lines, and is known in most collections as *Phæa divisa* (Chevrolat); but it appears nowhere to have been described under that name. In Pascoe's description the thorax is stated to have a black spot in its centre; but it is not mentioned that the spot covers a central boss. This feature is more strongly marked even than in *Ph. saperda*, the sides of the umbo being vertical and sharply defined, and the surface more or less punctate. The femora vary in colour, being sometimes black like the rest of the legs and the abdomen, and sometimes partly or wholly red. In one of Mr. Höge's examples the thoracic umbo is red, like the rest of the surface.

4. **Phæa lateralis.**

P. acromelæ proxime affinis, at differt thoracis umbone minus elevato, lateribusque infra nigris. Nigra, subnitida, setosa, capite thoraceque flavescenti-rufis, illo vitta post oculos, hoc vitta dorsali alteraque utrinque laterali nigris; antennis nigris, articulis 4°–9^{m} basi rufis; tibiis femoribusque anticis interdum rufis.

Variat capite antennisque toto nigris.

Long. $3\frac{1}{2}$–$4\frac{1}{2}$ lin.

Hab. Mexico, Cuernavaca (*Sallé*), Cerro de Plumas (*Höge*); Guatemala, San Isidro (*Champion*).

Closely allied to *P. acromela*, but different at first sight in the yellowish instead of bright-red colour of the head and the thorax, and in the centre of the latter being traversed by a broad black vitta from base to apex. The central umbo is also distinctly less elevated and its sides less vertical and sharply defined. The flanks of the thorax (above the insertion of the legs) have a broad black stripe. The punctuation of the elytra is nearly the same as in *P. acromela*, *i. e.* strongly impressed throughout, in distinct lines over the basal half and irregular over the apical portion.

5. **Phæa rufiventris.**

Phæa rufiventris, Bates, Trans. Ent. Soc. 1872, p. 228, note [1].

Hab. Mexico [1], Puebla, Izucar, Cuernavaca (*Sallé*).

6. **Phæa vitticollis.** (Tab. XV. fig. 7.)

Phæa vitticollis, Bates, Trans. Ent. Soc. 1872, p. 228, nota [1].

Hab. Mexico [1], Cuernavaca (*Sallé*).

7. **Phæa nigripennis.**

Testaceo-flava, antennis elytrisque nigris griseo-pubescentibus; cylindrica, thorace lateribus haud tumido,

umbone magno rotundato immarginato grosse sparsim punctato; elytris subplanatis, apicem versus leviter ampliatis, apice singulatim rotundatis; dorso lineatim (juxta apicem confuse) punctatis; antennis corpore (♂) longioribus, (♀) paullo brevioribus.

Long. 3–5 lin.

Hab. GUATEMALA, San Juan, Chacoj (*Champion*).

8. **Phæa flavovittata.**

Nigra, capite et thorace melleo-flavis vitta lata utrinque laterali ab oculo usque ad thoracis marginem posticum extensa nigra; thorace cylindrico, lateribus medio breviter tumido ibique grosse punctato, umbone rotundato, elevato, sulculo circumdato; scutello flavo; elytris subplanatis, versus apicem paullulum ampliatis, apice singulatim rotundatis, dorso lineatim (juxta apicem confuse) punctatis; femoribus basi flavis; antennis utroque sexu paullo brevioribus.

Long. $2\frac{1}{2}$–3 lin.

Hab. MEXICO, Cordova (*Sallé*); GUATEMALA, Zapote, Panzos, Chacoj, Teleman, San Gerónimo (*Champion*); BRITISH HONDURAS, Rio Honda (*Blancaneaux*).

9. **Phæa macilenta.**

Angusta, linearis, nigra, griseo-setosa, capite thoraceque aurantiaco-flavis, illo macula utrinque post oculum, hoc subtus utrinque plaga nigricantibus, pedibus plus minusve rufescenti-piceis; antennis hirsutis, nigris; capite grosse punctato; thorace cylindrico sparsim grosse punctato, lateribus haud tumidis, umbone lato paullulum elevato utrinque medio sulculo circumdato; elytris grosse et crebre lineatim, versus apicem confuse punctatis, apice obtuse subtruncatis.

Long. $3\frac{1}{2}$ lin. ♀.

Hab. MEXICO, Cuernavaca (*Sallé*), Paso del Macho (*Höge*).

10. **Phæa phthisica.**

P. macilentæ proxime affinis, differt præcipue antennarum articulis 5°–10^{m} basi pallidis. Angusta, linearis, passim longe pilosa, nigra, capite thoracis margine antico antennarumque articulis 5°–10^{m} basi melleo-flavis; capite utrinque post oculum nigro; thorace grosse punctato, lateribus fere rectis, umbone lato, haud elevato sed marginibus lateralibus sulco delimitatis; elytris dimidio basali lineatim, apicali confuse punctatis, apice obtuse subtruncatis.

Variat femoribus basi interdum pallidis; thoracis umbone utrinque flavo marginato.

Long. 2–$3\frac{1}{2}$ lin.

Hab. GUATEMALA (*Salvin*), Capetillo, Zapote, San Juan, San Isidro, El Reposo, San Gerónimo (*Champion*).

The resemblance between this and the preceding is very close, specimens occurring in which the pale bases of the antennal joints are scarcely perceptible. It may be considered the Guatemala representative of *P. macilenta*.

11. **Phæa tenuata.**

Phæa tenuata, Bates, Trans. Ent. Soc. 1872, p. 228, nota [1].

Hab. MEXICO[1], Cuernavaca, Juquila (*Sallé*).

Also closely allied to *P. macilenta*, but distinct, from its simple cylindrical thorax, all traces of umbo and its limiting sulci having disappeared.

12. **Phæa scapularis.**

P. phthisicæ affinis, differt præcipue elytris utrinque vitta humerali fulva. Linearis, nigra, pilosa, capite, thorace, vitta angusta humerali antennarumque articulis 4°–9^{m} basi melleo-fulvis, vitta lata ab oculo usque ad thoracis marginem posticum ducta nigra; capite flavo-pubescente; thorace cylindrico grosse sparsim punctato, umbone lato vix elevato utrinque sulco circumdato; elytris dimidio basali lineatim, apicali confuse punctatis, apice obtuse subtruncatis.

Long. 3–3$\frac{1}{4}$ lin.

Hab. GUATEMALA, Zapote (*Champion*).

13. **Phæa semirufa.**

Phæa semirufa, Bates, Trans. Ent. Soc. 1872, p. 228, nota [1].

Hab. MEXICO[1], Playa Vicente, Chinantla (*Sallé*).

Closely allied to *P. scapularis*, and resembling it in colours; but the fulvous stripe at the shoulders is expanded into a large acutely-triangular spot, extending nearly or quite as far as the suture; and the lateral black vitta of the thorax lies on the flanks, leaving the whole dorsal surface of the tawny-yellow hue; in *P. scapularis* the black stripe of the thorax extends to the upper surface, and the central yellow vitta is rather narrower. *P. semirufa* has also a conspicuously longer thorax, with the umbo margined on the sides.

14. **Phæa lineola.**

Phæa lineola, Bates, Trans. Ent. Soc. 1872, p. 228.

Phæa miniata, Pascoe, Trans. Ent. Soc. ser. 2, iv. p. 256?

Hab. NICARAGUA, Chontales (*Belt*).

As already recorded, a variety of this species occurs, apparently in equal numbers with the type, in which the elytra are entirely red. This agrees with the brief description of Pascoe's *Phæa miniata*, from Venezuela.

15. **Phæa rubella.**

P. lineolæ quoad colorem similis, sed distinctissima, corpore longiore et angustiore, thoracis umbone valde elevato, etc. Linearis, angusta, rufa et rufo-pilosa, antennis, tibiarum dimidio apicali tarsisque nigris; thorace fere lævi, lateribus medio tumido, umbone lato, elevato, punctato, sulco profundissimo, intus oblique inciso, utrinque marginato; elytris subplanatis, striato-punctatis, versus apicem sublævibus, apice late rotundatis.

Long. 3$\frac{1}{4}$ lin.

Hab. GUATEMALA, Chacoj (*Champion*).

16. **Phæa högei.**

Elongata, linearis, dense erecte pilosa, umbone, thoracis margine postico scutelloque nigro-penicillatis; nigra, capite, thorace (pectore excepto), elytris (fascia apicali excepta) sanguineo-rufis; antennis ♀ quam corporis dimidium paullo longioribus, nigris; umbone perparum elevato, lateribus obtusis, macula rotundata nigra.

Long. 6 lin. ♀.

Hab. Mexico, Oaxaca (*Höge*).

A species much more elongate and linear, or cylindrical, than *P. saperda*, and distinguished further by the bright red colour of the head, thorax, and elytra, the latter having the apical portion, to the extent of rather less than one fourth of the length, black. The elytra are rather strongly lineate-punctate, with the apical part less deeply and more irregularly punctured.

17. **Phæa nigromaculata.**

Brevior et latior, coccinea, griseo tenue pubescens et longe pilosa, antennis, umbone, tibiis et tarsis, elytrorumque macula humerali, altera majore rotunda anteapicali nigris; capite subcrebre punctato, fronte valde convexa; thorace lateribus medio tuberoso, umbone maxime elevato, antice et lateraliter abrupte declivi, supra planato et nigro-penicillato; elytris subplanatis ante apicem paullulum ampliatis, apice late rotundatis, supra versus basin sparsim vix lineatim punctatis, postice lævibus.

Long. 4 lin. ♂.

Hab. Mexico, Yucatan (*Sallé*).

By its robust form this species approaches *Tetraopes*; it has not, however, the fissile claws of that genus; the basal tooth is unusually large, but obtuse or rounded. I have adopted the name given to it by Pilate in the Sallé collection.

18. **Phæa tricolor.**

Elongata, subcylindrica, nigra, tenue griseo pubescens, nigro pilosa et partim penicillata, capite, scapo et thorace miniaceis, elytris dimidio basali albo-testaceis; capite lato, vertice penicillis duobus nigris, ♂ fronte planata, medio dilatata; thorace utrinque modice tumido, umbone latissimo, antice et lateraliter verticali, dorso nigro vel nigro-bimaculato et nigro-penicillato, marginibus anticis et posticis nigris nigro-hirsutis; scutello nigro-penicillato; elytris striato-punctatis, versus apicem sublævibus, nigris, dimidio basali albo-testaceis, macula humerali alteraque circumscutellari nigris; antennis dimidium corporis paullo superantibus, subtus ciliatis; femoribus interdum rufis.

Long. 4–5½ lin. ♂ ♀.

Hab. Mexico, Cordova (*Sallé*); Guatemala, San Juan (*Champion*).

19. **Phæa mirabilis.** (Tab. XV. fig. 6.)

Phæa mirabilis, Bates, Trans. Ent. Soc. 1873, p. 232

Hab. Nicaragua, Chontales (*Belt*).

20. **Phæa maxima.**

Elongata, robusta, subcylindrica, fusco-nigra, passim breviter fulvo-setosa, capite, thorace, femoribus basi (tibiisque anticis) elytrorumque margine aurantiacis; antennis (♀) gracilioribus, corporis dimidium vix superantibus, sparsim setosis, nigris, articulis 3°–7^m^ basi rufis; capite macula post oculum nigra; thorace utrinque valde tuberoso, umbone oblongo elevato lateribus verticalibus; elytris parallelis, punctulatis, utrinque indistincte bicostulatis.

Long. 7½ lin. ♀.

Hab. Mexico (*Hegewitsch, coll. Bates*).

A species differing in facies from all its congeners, and resembling the genus *Mecas* both in colours and in the relative great length and parallel form of the elytra. It

belongs, however, to *Phœa* by its divided eyes and the broad obtuse basal tooth of its claws, and approaches *Tetraopes* in the anterior coxæ being contiguous instead of separated by a narrow prosternal process as they are in *Phœa*.

21. **Phæa crocata.**

Phœa crocata, Pascoe, Trans. Ent. Soc. ser. 3, v. p. 288 [1].

Hab. PANAMA (*Boucard*).—SOUTH AMERICA, Colombia [1].

Differs from the other species of the genus in the form of the basal tooth of its tarsal claws, which, though short, is more narrow and pointed.

TETRAOPES.

Tetraopes, Serville, Ann. Soc. Ent. Fr. 1835, p. 68; Lacordaire, Gen. Col. ix. p. 879.

This genus is rather more northerly in its range than *Phœa*, many of the species being peculiar to the United States, and extending to Canada. None seems to be found further south than Nicaragua; about fourteen are known.

1. **Tetraopes cleroides.**

Tetraopes cleroïdes, Thomson, Class. Long. p. 66 [1].

Hab. MEXICO [1], Oaxaca, Etla (*Sallé*),

In the less convex surface of the elytra this and the following species connect the genus *Tetraopes* with *Phœa*.

2. **Tetraopes comes.**

T. cleroidi similis, sed multo magis elongatus. Niger, dense cæruleo-griseo tomentosus, elytris miniaceis, humeris, macula rotunda majore discoidali ante medium fasciaque curvata paullo ante apicem nigris, post fasciam area apicali cæruleo-grisea; thorace cylindrico, utrinque modice tuberoso, umbone oblongo, apud latera et basin sulco profundo delimitato, supra nigro-penicillato; scutello nigro-hirto; elytris medio planatis, basi utrinque (prope scutellum) sublobatis, fere lævibus, basin versus tantum sparse subtiliter lineatim-punctatis; antennis ♂ quam corpus longioribus, filiformibus.

Long. $6\frac{1}{4}$ lin. ♂.

Hab. GUATEMALA, Capetilló (*Champion*).

In colours resembling *T. cleroides*, but the round discoidal spot of the elytra very much larger, and the thoracic boss (similar in form) clothed with a longer and denser brush of black hairs.

3. **Tetraopes varicornis.**

Tetraopes varicornis, Castelnau, Hist. Nat. Col. ii. p. 487 (1840)[1].

Tetraopes undecimpunctatus, Thomson, Archiv. Ent. i. p. 60 (1857), var.

Hab. MEXICO [1], Chalchicomula (*Sallé*), near the capital (*Flohr*), Esperanza (*Höge*).

Approaches very near the common United-States species *T. tetraophthalmus* in the form and elevation of the thoracic umbo, which is of oval shape, *i. e.* with much-rounded sides, and punctate and shining; but it differs from that species in the obtuse lateral margins of the umbo being slightly elevated, even in the middle, and not continuous with the rest of the disk. In all varieties of elytral coloration the antennæ retain the same character, having the bases and apices of the joints narrowly edged with grey.

4. Tetraopes thoreyi.

T. varicorni var. 11-*punctato* valde affinis et similis, at differt antennis omnino nigris. Cylindricus, robustus, cinereo subtiliter pubescens et nigro setosus, niger, supra ruber, thorace maculis quatuor, scutello elytrisque utrinque maculis quatuor nigris; thoracis umbone sic ut in *T. varicorni*.
Long. 4–8½ lin.

Hab. Mexico, Oaxaca (*Sallé*).

Possibly only a local variety of *T. varicornis*. I retain for it the name given by Chevrolat in the Sallé collection.

5. Tetraopes thermophilus.

Tetraopes thermophilus, Chevrolat, Journ. Ent. i. p. 190[1].

Hab. Mexico, Vera Cruz[1] (*Sallé*).

6. Tetraopes subfasciatus.

T. thermophilo affinis et similis, at differt thoracis umbone angustiore magis punctato et nigro-hirsuto, lateribus a disco sulco separatis. Niger, cinereo subtiliter pubescens, et nigro setosus, supra ruber, thorace maculis quatuor, scutello, elytris maculis quatuor (2ª et 3ª interdum fasciatim conjunctis, quartaque valde transversa) nigris; antennis nigris, scapo aut intus aut toto rufo, femoribus (apice exceptis) rufis.
Variat scapo pedibusque toto nigris.
Long. 5½–6½ lin.

Hab. Mexico, Cuernavaca, Puebla (*Sallé*).

The second (lateral) spot of the elytra, absent in *T. thermophilus*, is in this species large and transverse, sometimes joining the subsutural spot, and thus forming an angular fascia. The thoracic umbo is decidedly narrower, and much more sharply limited on the sides, which are also separated from the rest of the disk by a distinct sulcus; its surface is thickly punctured and hairy. In some respects it approaches *T. collaris* of New Mexico, in which, however, the thoracic umbo is opaque and impunctate. The variety with black femora is named *nigripes*, Chev., in the Sallé collection.

7. Tetraopes umbonatus. (Tab. XV. fig. 15.)

Tetraopes umbonatus, Leconte, Journ. Ac. Phil. ser. 2, ii. p. 156 nota[1]; Bates, Trans. Ent. Soc. 1873, p. 232[2].

Hab. Mexico, Puenta Nacional[1], Cuernavaca, Puebla, Izucar (*Sallé*); Nicaragua, Chontales (*Belt*[2]).

According to the description, this species must be closely allied to the North-American *T. discoideus*, Lec. (Journ. Ac. Phil. ser. 4, p. 26); but Dr. Horn, in his recent revision of the North-American species, keeps them separate, and he has given me the result of his examination of Dr. Leconte's type specimen, which confirms the view that the insect here cited is really the *T. umbonatus* of that author. The thoracic umbo is very sharply elevated on the sides. The specimen figured is from Mexico.

8. **Tetraopes rubrocinereus.**

Tetraopes rubrocinereus, Thomson, Class. Long. p. 67.

Hab. MEXICO, Izucar, Oaxaca (*Sallé*), Jalapa (*Höge*); GUATEMALA, San Gerónimo, Guatemala city.

Group **PHYTÆCIINI.**

In this group I propose to include Lacordaire's Phytæciides vraies, Amphionychides, and Ærenicides, a numerous assemblage of forms in which the *Saperda* type of Lamiidæ reaches its highest development. The tarsal claws are nearly always fissile; *i. e.* the basal tooth is long and acute; and the elytra in the more typical genera are carinated on the sides. Some of the species have tufted antennæ; and others exhibit extraordinary mimetic resemblances.

OBEREA.

Oberea, Mulsant, Coléop. de France, Long., ed. 1, p. 194.

A genus of very wide distribution, and very numerous in species, about one hundred having been described. Many species occur in Europe and in North America, extending to high latitudes; and they abound in the Malayan and Indian regions. None, however, has been recorded from South America or Australia; a few have been described from Tropical Africa. The following is the only species as yet known from Mexico or Central America:—

1. **Oberea quinquepunctata.**

Flava, aureo-pubescens, elytris nigris, (epipleuris exceptis) cinereo subtiliter pubescentibus; fronte punctis duobus, vertice tribus (transversim positis), thorace quinque dorsalibus, altera utrinque prope coxas anticas, metasterno vittula laterali, femoribus basi, tibiis tarsis et antennis nigris; elytris subtiliter punctulatis.

Long. 7–8 lin. ♂ ♀.

Hab. MEXICO, Capulalpam, Juquila (*Sallé*).

Not dissimilar in form and colours to the North-European *O. oculata*, but very much more finely and sparsely punctured.

MECAS.

Pyrobolus (partim), Chevrolat, Rev. Zool. 1838, p. 284 (nom. præoccup.).
Mecas, Leconte, Journ. Ac. Phil. ser. 2, ii. p. 155 (1852); Horn, Trans. Am. Ent. Soc. vii. p. 44 (1878); Crotch, Check List Col. Am. North of Mexico, p. 92 (1874).
Oberea, Harold & Gemminger, Mun. Cat. p. 3196 (1873).
Phytæcia, Haldeman, Trans. Am. Phil. Soc. x. p. 57 (1847).
Dylobolus, Thomson, Physis, ii. 195 (1868).

In this genus, omitted in Lacordaire's great work 'Genera des Coléoptères,' the claws are bifid as in *Phytæcia*; but the body is long, subcylindrical, or linear, as in *Oberea*, to which some of the species bear a great general resemblance. The proportions of the ventral segments are as in *Phytæcia*. The head is not retractile, and is often very tumid behind the eyes. Six species have previously been described, from the United States and Mexico.

1. Mecas senescens.

M. inornatæ (Say) proxime affinis et similis; differt corpore angustiore, magis lineari. Cinerea, thorace cylindrico lateribus fere rectis, guttis quinque dorsalibus nigris nudis, quarum mediana supra lineam dorsalem longiore; elytris subtiliter punctulatis punctis hic illic lineatim seriatis; antennis cinereis supra nigrescentibus; ♂ segmentum apicale ventrale valde concavum.
Long. 5–6 lin. ♂ ♀.

Hab. Mexico, Puebla (*Sallé*), Mineral de Zimapan (*Hegewitsch, coll. Bates*).

Compared with a series of Texan specimens of *M. inornata*, this species differs in being decidedly narrower and more parallel-sided; the number of glabrous specks on the disk of the thorax seems also to be a good specific character.

2. Mecas rubripes.

M. senescenti affinis et forsan ejus varietas. Elongato-linearis, supra subplanata, sordide cinereo dense pubescens, femoribus rufis; thorace cylindrico, disco ut in *M. senescenti* maculis quinque glabris; elytris fortius punctatis suturaque pallidius cinerea.
Long. 5–6 lin. ♂ ♀.

Hab. Mexico (*Sturm*).

I have adopted for this species or variety the name given to it by Sturm in the Sallé collection.

3. Mecas ambigenus.

Brevior, cylindrica, sordide cinerea, setosa, capite longius hirsuto; antennis grossius filiformibus, griseo-annulatis; thorace transverso, lateribus rotundatis, disco punctis tribus glabris; elytris punctulatis, apice obtusissime oblique breviter truncatis; ♂ segmentum apicale ventrale profundissime foveatum.
Long. $5\frac{1}{2}$ lin.

Hab. Mexico (*Sturm*).

This species approaches very close to *Phytœcia*, and bridges over perfectly the interval which separates the two genera.

4. **Mecas laminata.**

Elongata, subgracilis, nigra, subtiliter cinereo-pubescens, vertice et pronoto rufis, nitidis, hoc disco tritubérculato, maculaque utrinque laterali nigra; antennis nigris, apicem versus cinereis; scutello rufo; elytris dorso planatis sublineatim punctulatis, epipleuris nigrescentibus, apice obtusissime rotundatis; ♂ segmentum apicale ventrale minus profunde concavum, fundo linea impressa.

Variat capite toto rufo, thorace absque guttis nigris margineque basali elytrorum rufo.

Long. $5\frac{1}{2}$–$6\frac{1}{2}$ lin. ♂ ♀.

Hab. MEXICO, Vera Cruz, Orizaba (*Sallé*); GUATEMALA, Zapote (*Champion*).

5. **Mecas obereoides.** (*Dylobolus obereoides*, Tab. XV. fig. 16.)

M. laminatæ similis, differt vertice et pronoto melleo-flavis, illo puncto mediano, hoc punctis tribus nigris. Elongata, subgracilis, fronte et corpore subtus dense subtiliter cinereo-pubescentibus; elytris nigris, margine laterali solum cinereo, apice obtusissime rotundatis; thorace nitido, dorso tuberculato punctis nigris transversim positis.

Long. $5\frac{1}{2}$–$6\frac{1}{2}$ lin.

Hab. MEXICO, Cuernavaca (*Sallé*).

6. **Mecas laticeps.**

Elongata, subgracilis, capite crassiore; fusco-nigra, pube tenui fusco-cinerea vestita, capite thoraceque melleo-fulvis opacis, hoc pube cinereo-flava vittatim variegato; capite post oculos valde dilatato ibique nigro; thorace breviter cylindrico, medio utrinque paullo rotundato, antice et postice leviter constricto; elytris ante apicem paullulum dilatatis, crebre usque ad apicem punctulatis, cinereo-nigris, margine laterali densius cinereo-pubescente, apice juxta suturam oblique truncatis; ventre unicolori; ♂ segmentum apicale ventrale late profunde foveatum.

Long. 6–$6\frac{1}{2}$ lin. ♂ ♀.

Hab. MEXICO, Guanajuato (*Sallé*).

This species was ticketed *Saperda immaculicollis* by Sturm. I cannot adopt the specific name, as the thorax has a more or less variegated appearance, according to the density of the pale pubescent stripes, and the interspaces are sometimes partially fuscous. The abdomen is unicolorous dark cinereous in both sexes, a character which distinguishes the species from the two following.

7. **Mecas mexicana.**

M. laticipiti proxime affinis et simillima, sed differt ventris segmentis tribus apicalibus utrinque late flavo-cinereis (ut in *Lampyridibus*). Valde elongata, nigra, pube tenui fusco-cinerea vestita, capite thoraceque melleo-fulvis, opacis, hoc dilutius fulvo vittato; capite post oculos tumido ibique quam thorax latiore et nigro vittato; thorace breviter cylindrico, medio utrinque paullo rotundato, antice et postice leviter constricto; elytris subtiliter punctatis cinereo-nigris, sutura concolori, marginibus lateralibus (plica epipleurali) apice excepto cinereo-fulvis; subtus cinereo-nigra (prothorace plerumque fulvo), ventris segmentis tribus apicalibus densissime cinereo-flavo pubescentibus, sericeis, medio tantum nigris.

Long. $6\frac{1}{2}$–7 lin. ♀.

Hab. MEXICO, Etla, Izucar (*Sallé*).

According to M. Sallé, this is the *Oberea mexicana* of Dejean's Catalogue.

8. **Mecas rotundicollis.**

Dylobolus rotundicollis, Thomson, Physis, ii. p. 196.

Hab. MEXICO, Cordova, Panistlahuca (*Sallé*), Misantla (*Höge*); GUATEMALA, San Joaquin, Guatemala city (*Champion*).

Both sexes have the *Lampyris*-like pale lateral patches of the three terminal segments of the abdomen. The pale rufous suture and margins of the elytra seem to form also a constant character. The apex of the elytra is still more obliquely and sharply truncated from the sutural angle. Four examples taken by M. Höge at Misantla are perfectly uniform.

9. **Mecas ruficollis.**

Mecas ruficollis, Horn, Trans. Am. Ent. Soc. vii. p. 44 (1878)[1].

Hab. NORTH AMERICA, Texas[1].—MEXICO (*Horn*)[1].

A species, judging from the description, intermediate between *M. laticeps* and *M. rotundicollis*.

PANNYCHIS.

Pannychis, Thomson, Syst. Ceramb. p. 127.

A genus very closely allied to *Mecas*, but with a difference of habit, due chiefly to its broader and more depressed form of body and different coloration. Its chief structural character is furnished by the vertical epipleuræ of the elytra, which are sharply defined from the dorsal surface, except towards the apex, where the sides are somewhat dilated. In some species the dorsal surface of the elytra is ribbed. Thomson described two species from Mexico. If I have determined the second one (*P. melanophiloïdes*) correctly, it does not belong to the genus, but to *Alampyris*, described further on.

1. **Pannychis sericeus.**

Pannychis sericeus, Thomson, Syst. Ceramb. p. 197[1].

Hab. MEXICO[1], Orizaba, Cordova (*Sallé*).

2. **Pannychis ducalis.**

Valde elongatus, postice paullo dilatatus, supra depressus, opacus, subtiliter pubescens, niger, capite, thorace elytrorumque fascia lata mediana fulvis; capite fascia inter antennis vittisque tribus posticis nigris, post oculos dilatato; thorace medio utrinque fortiter rotundato-dilatato, vittis tribus nigris; elytris apice singulatim rotundatis, subtiliter punctulatis, utrinque lineis duabus indistincte lævibus; prosterno et mesosterno medio, femoribus anticis toto, intermediis et posticis dimidio basali fulvo-rufis; ♂ segmentum apicale ventrale medio fovea rotunda profunda.

♀? Colores ut in ♂. Differt elytris dorso utrinque bicostatis, fascia frontali interrupta, thoracis tubere laterali dense aureo-piloso.

Long. 8–9 lin.

Hab. MEXICO, ♂ Orizaba (*Sallé*); ♀ coll. Bates (ex coll. A. Turner).

The fulvous belt of the elytra occupies about one third their length; and the colour extends along the suture towards the scutellum. The antennæ and abdomen are entirely black. Although the male example above described has no dorsal costæ, it has rudiments of the same in two narrow impunctate lines extending nearly the whole length.

3. **Pannychis callicerus.**

P. ducali similis, at differt inter alia antennarum articulo quarto fulvo. Maxime elongatus, subcylindricus, opacus, breviter pilosus, niger; capite, thorace, elytrorum fascia mediana, antennarum articulo 4^to^ (apice excepto), sternis medio, femoribus anticis toto, alteris quatuor basi, et ventris segmentis 3° 4° que medio fulvis; capite macula triangulari frontali, linea verticali fasciaque lata utrinque post oculum fusco-nigris; thorace antice angustiore, pone medium paullo dilatato, fascia utrinque lata nigra; elytris apice prope suturam utrinque emarginatis, dorso bicostulatis, interstitiis punctulatis; antennis (♀) brevibus, apicem versus attenuatis, articulo tertio crassiore.

Long. $8\frac{1}{2}$ lin. ♀.

Hab. MEXICO (*Hopfner*), coll. Bates.

Very similar to *P. ducalis* ♀, but differing in many points. The thorax is not broadly dilated in the middle, but only slightly widened behind the middle, and it appears longer and narrowed anteriorly. The elytra, instead of being entire at the apex, have a rather deep sinuation near the suture, and the fulvous fascia is narrow, exactly median, and the tawny colour is not continued along the suture towards the scutellum. The central spot on the third and fourth ventral segments, and the fulvous fourth antennal joint, are also distinguishing characters.

ÆRENICA.

Ærenica, Thomson, Arch. Ent. i. p. 311; Lacordaire, Gen. Col. ix. p. 898.

Four species of this genus, peculiar to Tropical America, have been described; but others exist unpublished in collections. The genus ranges from the province of Paraná in South Brazil to Guatemala.

1. **Ærenica hirsuta.**

Æ. hirticorni affinis, differt colore viridi-cinereo. Linearis, passim longe subdense hirsuta, viridi-grisea, thorace linea dorsali (medio linea impressa divisa) alteris que duabus lateralibus obliquis pallidius cinereis; elytris utrinque apice modice acutis, supra strigis tenuibus plurimis longitudinalibus fasciisque obliquis latioribus prope basin et apicem vittaque curvata laterali pallide cinereis; antennarum scapo elongato, articulo tertio multo longiore; corpore subtus cinereo multistriguloso.

Long. 6 lin.

Hab. GUATEMALA, Zapote (*Champion*).

ANTODICE.

Antodice, Thomson, Syst. Ceramb. p. 128 ; Lacordaire, Gen. Col. ix. p. 900.

A genus very closely allied to *Ærenica*, differing only in the closer approximation of the eyes on the crown, and the rounded, instead of acute, apices of the elytra. The long antennal scape, which distinguishes the typical species of *Ærenica*, is not constant in that genus; otherwise it would be a good differential character, the scape in *Antodice* being short. Neither is the notch of the middle tibiæ, pointed out by Lacordaire as distinguishing *Antodice*, here of systematic value, as it is well developed in *Ærenica hirticornis*.

The geographical range of *Antodice* is similar to that of *Ærenica*; but it extends a little further north, into Mexico.

1. **Antodice cretata.** (Tab. XV. fig. 8.)

Antodice cretata, Bates, Trans. Ent. Soc. 1872, p. 232[1].

Hab. Mexico, Orizaba (*Sallé*); Guatemala, Senahu (*Champion*); Nicaragua, Chontales (*Belt*)[1].

2. **Antodice nympha.**

A. cretata minor et gracilior, griseo-fusca, tenuiter setosa, capite utrinque maculis duabus (ad basin antennarum et post oculum), thorace vitta flexuosa laterali, elytris utrinque guttis duabus humeros versus, altera in mediis elytris, signaturis tribus prope apicem (quarum prima S-formis est) cretaceo-albis; corpore subtus usque abdominis apicem lateraliter albo-maculato; antennis pedibusque fulvis, illarum articulis a tertio dimidio apicali fuscis.

Long. 6 lin.

Hab. Mexico, Playa Vicente (*Sallé*); Guatemala, Zapote (*Champion*).

AMILLARUS.

Amillarus, Thomson, Arch. Ent. i. p. 312 (1857).

The following is the only known species:—

1. **Amillarus apicalis.** (Tab. XV. fig. 14.)

Amillarus apicalis, Thomson, Class. Long. p. 44 (1860), ♂[1].

Amillarus erythroderus, Chevrolat, Journ. of Ent. i. p. 189 (1861), ♀[2].

Amillarus mutabilis, Bates, Ann. & Mag. Nat. Hist. ser. 3, xvii. p. 432 (1866), ♂ ♀[3].

Hab. Nicaragua, Chontales (*Belt*); Panama (*Boucard*).—South America, Colombia[1], Venezuela[2], Amazons[3].

The males have the apical portion of the elytra to a greater or less extent black; in the females the elytra are entirely black. The legs vary in colour, at least in the specimens from the Amazons. Mr. Belt obtained only one female example from Chontales.

ERANA.

Erana, Bates, Ann. & Mag. Nat. Hist. ser. 3, xvii. p. 431 (1866).

Although widely separated from it by Lacordaire, this genus differs from *Essostrutha* only by the much slenderer antennæ, the greater length of the scape, and the fringe of hairs above, as well as beneath, the joints. The difference in the width of the head, and its consequent more or less retractility within the thorax, is very slight, the head being relatively broader in *Erana* than in *Essostrutha*. The Brazilian species *Saperda triangularis* (Germar), which I had referred to the genus, must be removed from it. The following Central-American species differ somewhat from the generic type, *E. cincticornis*, in the greater length and slenderness of the antennæ, of which the third joint is very long and slightly curved; but in the length and shape of the scape and pilosity of these organs they agree very well with *E. cincticornis*.

1. Erana pusilla.

Erana pusilla, Bates, Trans. Ent. Soc. 1873, p. 233[1].

Parva, linearis, supra subplanata, erecte tenuiter pilosa, subtus nigra episternis albis, supra colore variabilis: ♂ fulvo-rufa vel fulva, capite et thorace lateribus elytrisque sutura et vitta laterali fusco-nigris; ♀ cinereo-nigra, capite thoraceque medio rufo-fulvis, vel nigra capite thoraceque medio fulvis vel toto nigris, thorace linea mediana cinereo-fulva; antennis fulvis, scapo nigro; pedibus ♂ toto fulvis, ♀ fulvis, quatuor posterioribus nigro-variegatis vel nigris, duobus anticis tantum fulvis; elytris apice ♂ rotundatis, ♀ angulo suturali breviter dentiformi.

Long. $3\frac{1}{4}$–$3\frac{1}{2}$ lin. ♂ ♀.

Hab. GUATEMALA, Dueñas, San Gerónimo (*Champion*); NICARAGUA, Chontales (*Belt*)[1].

The original description above cited was drawn up from a single female specimen taken by Mr. Belt. Mr. Champion having since sent home a good series of both sexes, I have been enabled to complete it, especially with regard to the variation in colour.

2. Erana pectoralis.

E. pusillæ proxime affinis, at differt abdomine plus minusve fulvo. Parva, supra subplanata, densius erecte pilosa; subtus nigra, abdomine fulvo vel cinereo-nigro lateribus aut apice fulvis, episternis flavis; supra colore variabili; ♂ fulva, thorace plaga laterali, elytris vittis laterali et suturali nigris; ♀ elytris nigris, capite et thorace vel toto fulvis vel fulvis thorace plaga laterali nigra; antennis fulvis, scapo et articulis 2° toto, 3° et sequentibus apice nigris, tertio plus minusve piceo; pedibus utriusque sexus flavis, tibiis et tarsis nigrescentibus; elytris apice ♂ ♀ rotundatis.

Long. $2\frac{1}{4}$–$3\frac{1}{2}$ lin. ♂ ♀.

Hab. MEXICO, Cordova, Orizaba, Tuxtla (*Sallé*); GUATEMALA, San Isidro (*Champion*).

This species has been known for a long time in collections as *Phytœcia pectoralis,* Chevr., MS., a name which I have adopted. Its points of difference from *E. pusilla* are slight, but they seem to be of specific value when a numerous series of each is examined.

3. Erana leuconoe.

Parva, cinereo-nigra, sparsim setosa, capite linea dorsali, duabus utrinque lateralibus, thorace (maculis duabus basalibus nigris exceptis) corporeque subtus vitta laterali albo-tomentosis; antennis albo-testaceis, scapo articulisque 2° et 3° basi, sequentibus apice nigris; elytris apice breviter truncatis, angulo exteriore dentiformi; pedibus albo-testaceis, tarsis tibiisque plus minusve infuscatis.

Long. $3\frac{1}{2}$ lin. ♀?

Hab. NICARAGUA, Chontales (*Janson*); PANAMA, Chiriqui (*Boucard*).

4. Erana florula.

Modice elongata, linearis, subplanata, dense breviter pilosa, nigra, subtus cinereo-pubescens, episternis albis; supra thorace cylindrico, medio paullulum dilatato, carneo-rufo-tomentoso, media basi et ad latera flavescente, maculis quatuor (2 anticis minoribus, 2 posticis triplo majoribus) nigris subnudis; elytris crebre punctulatis, versus apicem sublævibus, apice breviter truncatis; antennis scapo et articulis 2° et 3° nigris, 8°–11^{m} piceo-fuscis, 4°–7^{m} flavo-testaceis, apice piceo-fuscis; pedibus flavo-testaceis, genubus, tibiis et tarsis plus minusve nigrescentibus.

♀ capite magno, convexo, punctato, genibus subter oculum cinereis.

Long. $2\frac{1}{2}$–$3\frac{1}{4}$ lin. ♂ ♀.

Hab. GUATEMALA, San Juan, Panima, Senahu (*Champion*).

5. Erana dispar.

E. florulæ similis, sed differt thorace ♂ antice valde angustato. Linearis, breviter pilosa, nigra, cinereo pubescens; thorace supra flavo-cinereo tomentoso, maculis quatuor (vel vittis duabus) nigris; elytris apice rotundatis; antennis flavo-testaceis, scapo, articulo 2° et 3° basi, 3°–8^{m} apice nigris, 9°–11^{m} totis fusco-nigris.

♂. Caput angustius, inter antennas valde concavum, fronte, linea verticis genarumque vittis duabus albo-cinereis; thorax post medium dilatatus, deinde ad apicem fortiter angustatus; corpus infra cinereo-nigrum; sterna lateribus (vel episternum tantum) cinereo-albis; pedes flavo-testacei, tibiis et tarsis nigrescentibus.

♀. Caput magnum, convexum, inter antennas haud concavum, fronte nigra, linea verticis genarumque vittis cinereis; thorax breviter cylindricus; corpus infra nigrum, sternis concoloribus, abdominis segmentis 3°–5^{m} utrinque flavo tomentosis; pedes nigri, femoribus anticis flavo-testaceis.

Long. 2–4 lin. ♂ ♀.

Hab. MEXICO, Cordova (*Sallé*); GUATEMALA, near the city (*Salvin*), San Gerónimo (*Champion*).

6. Erana suavissima.

Linearis, minus planata, erecte pilosa, nigra, capite thoraceque aureo-tomentosis, vittis utrinque lateralibus duabus communibus nigris, thoracis duabus interioribus basi dilatatis; antennis flavis, articulis 1°–3^{m} et 8°–11^{m} nigris; elytris obtuse truncatis; pedibus nigris, femoribus anticis basi flavis; corpore subtus nigro. ♀.

Long. $2\frac{1}{2}$–$2\frac{3}{4}$ lin. ♀.

Hab. GUATEMALA, Zapote (*Champion*).

7. Erana univittata.

E. suavissimæ quam maxime affinis, differt tantum capite et thorace nigris vitta mediana aureo-flava, antennarum articulis 3° et sequentibus testaceo-flavis et episternis linea fulva notatis.

Long. $3\frac{1}{2}$ lin. ♀.

Hab. MEXICO, Juquila (*Boucard, coll. Sallé*).

8. **Erana fulveola.**

Fulva, aureo tenuiter pubescens, sparsim setosa, corpore subtus, elytrorum epipleuris et apice antennisque (♀ articulo 4°, ♂ articulis 4° et 5° exceptis) nigris; pedibus fulvis, quatuor posteriorum tibiis et femoribus nigris; pectore medio episternisque fulvis; elytris apice utrinque breviter sinuato-truncatis.

Long. 4 lin. ♂ ♀.

Hab. GUATEMALA, San Juan (*Champion*).

ESSOSTRUTHA.

Essostrutha, Thomson, Physis, ii. p. 198; Lacordaire, Gen. Col. ix. p. 895.

Like *Erana* this genus appears to be confined to Mexico and the countries immediately adjoining it on the south.

1. **Essostrutha læta.**

Saperda læta, Newman, Entom. p. 13[1].

Essostrutha læta, Thomson, Physis, ii. p. 199; Lacordaire, Gen. Col. ix. p. 895, nota.

Hab. MEXICO[1], Playa Vicente, Tuxtla, Panistlahuca (*Sallé*).

After a careful examination of the large series of *Essostruthæ* in the Sallé and other collections from Mexico, and the numerous specimens sent by Mr. Champion from Guatemala, I am disposed to disagree with Thomson and Lacordaire that all the varieties they mention belong to one species. If they are one species, it is one of those cases in which the varieties are different and constant in different localities. Newman's description applies to one of the rarest of the varieties, in which the head and thorax are "rufa" and the elytra "cana," with black lateral border and the thighs red. Specimens in the Sallé collection agree pretty closely with this description; and I find them associated with colour-varieties quite different from what I consider to be allied species. In *E. læta* the elytra are unicolorous, either grey, greyish black (sometimes with paler suture), or deep black. The colouring of the vertical epipleuræ is peculiar and distinctive of the species,—the basal portion having, in all the varieties, a wedge-shaped vitta red or reddish ashy, the rest of the epipleuræ being of the same colour as the dorsal surface—except in the grey specimen, where the angular upper edge has a long blackish streak, answering to Newman's "margine laterali nigra." The abdomen beneath and the episterna are always orange-red or tawny, the centre of the breast and abdomen grey; and the round black spot, distinctive of *E. fimbriolata,* on the flank of the prothorax, near the socket of the haunch, is almost always absent. There appears to be in *E. læta* no sexual distinction in colours as in *E. fimbriolata.*

2. **Essostrutha fimbriolata.**

Amphionycha albina, Pascoe, Trans. Ent. Soc. ser. 2, iv. p. 256?

E. lætæ valde affinis, differt ♂ ♀ coloribus disparibus: ♂ supra cinereo-flavus vel fulvus, elytris unicoloribus;

♀ rufa vel fulva vel cinereo-alba, elytris basi et apice plus minusve margineque laterali usque prope humeros nigris. Linearis (♂ angustus, gracilis, capite minore; ♀ robustior, capite majore convexo), capite post oculos ♂ gutta et ♀ vitta lata nigris; thorace dorso maculis quatuor nigris alteraque laterali prope acetabula antica; corpore subtus cinereo, abdominis segmentis apicalibus ad latera fulvis; pedibus nigris, cinereo tomentosis.

Long. 4–6 lin. ♂ ♀.

Hab. Mexico, Cuernavaca, Panistlahuca, Tuxtla, Playa Vicente, Oaxaca (*Sallé*), Juquila (*Höge*).

I have adopted for this species the MS. name given to one of its varieties by Chevrolat. The short description of *A. albina* published by Pascoe is evidently drawn up from the male of this or an allied species; but the colour "griseo-alba" does not apply to any of the examples I have seen; and it is further stated to be from Guatemala, from which country no insect answering to the description is contained in the collections of Sallé and Champion.

The specimens from Juquila and the Pacific coast are more slender than those of Central Mexico, and the males often have a pale fuscous spot at the apex of the elytra.

3. Essostrutha miniata.

Essostrutha læta, var. *miniata*, Lacordaire, Gen. Col. ix. p. 895[1].

Hab. Mexico[1], Tehuantepec (*Sumichrast*).

The only specimen I have seen which answers to Lacordaire's brief description, "rouge de cinabre avec quatre points sur le prothorax et le sommet des elytres, sur une étendue variable, noires," is a female in the Sallé collection from Tehuantepec. I have a male specimen, from a small collection made by Sumichrast in Tehuantepec, which I believe to be the source whence M. Sallé's example was obtained; and it differs in so many points from the males of both *E. læta* and *fimbriolata*, that it cannot be considered other than a distinct species. Both males and females are much more elongate than the species just cited, and both are of a rich cinnabar colour; the male has only two (the hinder pair) thoracic spots, and the elytra are free from black marks, except on the humeral callus; the female has four spots on the thorax, and a broad apical and narrow lateral margin (not reaching the shoulders), black; the flanks of the prothorax show the small black spot in both sexes. The antennæ in the male are long and robust. Length 6 lin.

4. Essostrutha cinnabarina.

E. lætæ affinis, sed brevior, præcipue ♀ latior et robustior, læte miniata, ♂ interdum rufo-ochraceus, capite macula pone oculos, thoraceque maculis 4 dorsalibus nigris, elytris (callo humerali fusco excepto) immaculatis; subtus cum pedibus cinereo-nigris, episternis ♂ posticis (et abdominis lateribus) rufis vel fulvis, ♀ omnibus infuscatis.

Long. 4–5$\frac{1}{4}$ lin. ♂ ♀.

Hab. Guatemala, Zapote (*Champion*).

Mr. Champion sent home a large series of specimens, all conforming to the above description.

5. **Essostrutha binotata.** (*Erana binotata*, Tab. XV. fig. 18.)

Angusta, elongata, nigro-fusca, cinereo pubescens, subtiliter ac breviter erecte pilosa; capite et thorace fulvo-ochraceis, illo macula laterali postica oculum intus amplectente, hoc medio maculis basalibus duabus nigro-fuscis; elytris sutura fulva, apice obtuse rotundatis, supra punctulatis, costulis utrinque duabus vix elevatis; corpore subtus pedibusque fulvis vel fulvo-cinereis, illo medio tibiis tarsisque posticis nigro-fuscis; antennis quam corpus multo longioribus, filiformibus, robustis, nigris, articulis basi et infra plus minusve griseis, subtus dense ciliatis.

Long. 4–5 lin. ♂ ♀.

Hab. Mexico, Puebla, Cuernavaca (*Sallé*), Tehuantepec (*Sumichrast*).

This species belongs to *Essostrutha* rather than to *Erana*, where I was inclined at first to place it—the robust, filiform antennæ, ciliated beneath and not above, and the shorter and thicker scape bringing it within the definition of the former genus. In form and colours it resembles *Erana leuconoe*. There is no colour-difference between the sexes.

ISCHNOPHYGAS.

Ischnophygas, Thomson, Physis, ii. p. 196; Lacordaire, Gen. Col. ix. p. 902.

The following species, which I have not seen, is the only one recorded as belonging to this genus. The scape of the antennæ being shorter than the third joint shows it to be quite distinct from *Erana*, with which it seems to agree in some other respects.

1. **Ischnophygas telephoroides.**

Ischnophygas telephoroïdes, Thomson, Physis, ii. p. 196.

Hab. Mexico.

EULACHNESIA.

Eulachnesia, Bates, Trans. Ent. Soc. 1872, p. 231.

Two species of this handsome genus have been described, one from South and the other from Central America; others exist undescribed in collections from Colombia.

1. **Eulachnesia smaragdina.** (Tab. XV. fig. 11.)

Eulachnesia smaragdina, Bates, Trans. Ent. Soc. 1872, p. 231.

Hab. Nicaragua, Chontales (*Belt*).

CEPHALODINA.

Amphionycha (partim), Bates, Ann. & Mag. Nat. Hist. ser. 3, xvii. p. 429.

Gen. *Amphionychæ* affine, sed capite magno, præcipue ♀ dilatato et supra convexo, elytrisque lateribus haud distincte carinatis. Corpus breviter cylindricum. Antennæ breviter pubescentes, infra longe ciliatæ; scapo quam articulum tertium fere dimidio breviore, gracili, clavato; articulo 3° longissimo, 4° multo breviore. Elytra apice rotundata, epipleuris altis, margine superiore haud distincte carinato.

The combination of enlarged head in both sexes, excessively developed in the female, and the absence of the usual sharply defined line or carina on the sides of the elytra, effectually distinguishes this genus from *Amphionycha*, with which it agrees in the proportions and clothing of the antennal joints. The pubescence which clothes the upper surface of the joints is very short and incumbent. The body is much less elongated than is the rule in *Amphionycha*. The enlarged head alone would not be a sufficient generic character, as it is frequent, sometimes in the female only, in *Amphionycha*.

Three species of the genus are known, from Central America and the northern parts of South America.

1. **Cephalodina capito.**

Amphionycha capito, Bates, Ann. & Mag. Nat. Hist. ser. 3, xvii. p. 429, nota.

Hab. Panama (*Bates*, *ex coll. Saunders*).

2. **Cephalodina crassiceps.** (*Amphionycha crassiceps*, Tab. XV. fig. 5.)

Amphionycha capito?, Bates, Trans. Ent. Soc. 1872, p. 231.

Breviter cylindrica, robusta, sparsim erecte pilosa, subtus nigra, griseo pubescens, supra capite et thorace albis opacis, illo epistomate, plaga triangulari verticis vittaque utrinque pone oculum, hoc macula rotundata disci, nigris; elytris nigris, apice griseis; antennis nigris, articulis 5° et 6° totis, 4° apice 7°que basi albis; thorace breviter cylindrico, basi paullo angustato et depresso dorso antico convexo; elytris subtiliter nigro-pubescentibus indistincte punctulatis; pedibus nigris, femoribus 4 anticis basi flavis.

Long. 5½ lin. ♀.

Hab. Nicaragua, Chontales (*Belt*).

One example only of this remarkable insect was found by Mr. Belt. It differs from the other known species, *C. capito* and *C. megacephala*, in the head having no trace of concavity between the eyes.

CIRRHICERA.

Cirrhicera, Thomson, Archiv. Ent. i. p. 309; Lacordaire, Gen. Col. ix. p. 892.
Hemilophus (partim), Castlenau, Hist. Nat. Ins. ii. p. 489.

Four species of this pretty genus, peculiar to Central America and Mexico, have previously been described. Lacordaire remarked that it differs in nothing from the typical *Amphionychæ* except the long hair-tufts on the fifth and sixth antennal joints; it must be added that it also differs in the elongation of the fourth joint, which is but little shorter than the third. The sides of the elytra are more or less distinctly carinated; and the high and vertical epipleuræ are furrowed with longitudinal punctured striæ.

1. **Cirrhicera leuconotus.**

Hemilophus leuconotus, Castlenau, Hist. Nat. Ins. ii. p. 489 [1].

Hab. Mexico [1], Orizaba (*Sallé*).

2. **Cirrhicera sallæi.**

Cirrhicera sallei, Thomson, Archiv. Ent. i. p. 310[1]; Bates, Trans. Ent. Soc. 1872, p. 231[2].

Hab. Mexico[1], Chinantla, Tuxtla, Cordova (*Sallé*); Guatemala, San Juan (*Champion*); Nicaragua, Chontales (*Belt*[2]).

3. **Cirrhicera championi.** (Tab. XV. fig. 12.)

C. sallæi proxime affinis, at differt maculis elytrorum minoribus, rotundatis, abdomineque utrinque maculis albis parvis quinque. Minor, pallide umbrina, cinereo pubescens, fronte, macula thoracis magna laterali, elytrorumque maculis utrinque duabus rotundatis, prope suturam sed plerumque haud attingentibus, niveis vel sulphureis fusco cinctis; elytris apice sinuato-truncatis, angulis acutis, exteriore valde producto; antennis testaceo-albis, articulis 1° et 2° castaneis, 5° et 6° nigris nigro penicillatis; meso- et metasterno apud latera albis vel sulphureis; abdominis singulis segmentis macula parva laterali alba; pedibus pallide flavis.

Long. 3–5 lin. ♂ ♀.

Hab. Guatemala, San Gerónimo, Zapote (*Champion*).

4. **Cirrhicera longifrons.**

Magis elongata, saturatius umbrina, sericea, capite antice valde elongato et plano, vittaque utrinque juxta oculum flava; thorace angustiore, vitta lata laterali flava obliqua rectilinea, spatio dorsali umbrino postice gradatim dilatato; elytris maculis suturalibus duabus communibus flavis, apice truncatis, angulis acutis; antennis castaneis (scapo obscuriore), articulis 5° et 6° nigris et nigro penicillatis, 7°–11^m^ flavis; pedibus castaneo-rufis vel fuscis; pectoris lateribus flavis; abdomine fusco immaculato.

Long. 5–6½ lin. ♂ ♀.

Hab. Guatemala, Purula (*Champion*).

5. **Cirrhicera niveosignata.**

Cirrhicera niveosignata, Thomson, Class. Long. p. 64[1].

Hab. Mexico[1], Playa Vicente (*Sallé*).

6. **Cirrhicera nigrina.**

Cirrhicera nigrina, Thomson, Archiv. Ent. i. p. 310[1].

Hab. Mexico (*lapsu calami* Venezuela[1]), Cordova, Tuxtla (*Sallé*).

This and *C. niveosignata* differ from the preceding species by the antennæ being fringed with long hairs above as well as beneath.

7. **Cirrhicera cristipennis.**

Castaneo-fusca, thoracis lineolis curvatis duabus basalibus, elytrorum gutta utrinque suturali versus apicem, pectorisque lateribus albis; pedibus et antennis fulvis, his scapo, articulis 3° apice, 5° et 6° totis nigro penicillatis; thoracis disco tuberculo valde elevato; elytris tuberculo centro-basali compresso, penicillato, apice sinuato-truncatis.

Long. 3½ lin.

Hab. Mexico (*Sallé*).

8. **Cirrhicera cinereola.**

Cinereo-ochracea, tomentosa, vertice et thorace linea communi dorsali elytrisque guttis utrinque duabus versus latera (prima mediana, secunda apicem versus) nigris ; antennis griseis, articulis 3° et 4° apice, 5° et 6° totis nigris, his infra nigro penicillatis.

Long. 4½ lin. ♂.

Hab. GUATEMALA, near the city (*Champion*).

PHŒBE.

Phœbe, Serville, Ann. Soc. Ent. Fr. 1835, p. 37 ; Lacordaire, Gen. Col. ix. p. 892.

Amphionycha (partim), Bates, Ann. & Mag. Nat. Hist. ser. 3, xvii. p. 249 ; id. Trans. Ent. Soc. 1872, p. 230.

Seven species of this genus have been described, all Tropical South-American. The pair of curious horn-like projections from the forehead are in some species reduced to obtuse tubercles; were they absent altogether, scarcely any thing would remain to distinguish the genus from *Amphionycha*. The lateral carina is sharply limited, more or less curved, sometimes even flexuous, and terminating abruptly at three fourths the length of the elytra.

1. **Phœbe mexicana.**

P. cavæ (Germar) quam maxime affinis, differt tantum thoracis lateribus utrinque nigro bimaculatis nec vittatis, elytrisque apice maculis quatuor omnibus rotundatis. Cretacea, pedibus et antennis (scapo nigro excepto) melleo-flavis, vertice, thoracis disco elytrisque (versus basin et apicem) nigro-guttatis, elytrorum carina et margine laterali fuscis.

Long. 7½ lin. ♀.

Hab. MEXICO, Playa Vicente (*Sallé*).

2. **Phœbe albaria.** (*Amphionycha albaria*, Tab. XV. fig. 3.)

Amphionycha albaria, Bates, Trans. Ent. Soc. 1872, p. 230.

Hab. NICARAGUA, Chontales (*Belt*).

Shorter and broader than any other species previously described, and the lateral carina of the elytra strongly flexuous. It presents the characteristic feature of the genus in two distinct but obtuse frontal tubercles.

3. **Phœbe luteola.**

Parva, fulva, corpore subtus, capite, thoracis vittis duabus latis (antice abbreviatis) elytrorumque basi fasciis duabus latera haud attingentibus (prima versus basin, secunda versus apicem) et macula utrinque discoidali cretaceis ; pedibus pallide flavis, antennis melleo-flavis ; fronte (♂) tuberculis elongatis vix elevatis flavo-strigatis.

Long. 3 lin. ♂.

Hab. GUATEMALA, Pantaleon (*Champion*).

AMPHIONYCHA.

Pyrobolus (partim), Chevrolat in Guérin, Rev. Zool. 1838, p. 284 (nom. præocc.).
Amphionycha (partim), id. ib.; Leseleuc in Guérin, Mag. Zool. Ins. v. pl. 138, p. 1 (1844); Thomson, Archiv. Ent. i. p. 311 (1857); id. Syst. Ceramb. p. 127; id. Physis, ii. p. 197; Lacordaire, Gen. Col. ix. p. 890 (1872); Bates, Ann. & Mag. Nat. Hist. ser. 3, xvii. p. 426 (1866).
Zeale, Pascoe, Trans. Ent. Soc. ser. 3, v. p. 287 (1866).
Œdudes, Thomson, Physis, ii. p. 199 (1867).

This genus was introduced to science under the name above given by Dejean in his 'Catalogue des Coléoptères.' Unfortunately it remained for many years without published characters; and as Dr. Leconte, in 1852, was thought to be the first to give a generic formula, which unfortunately excludes nearly all the species before and since described under the name, Dr. Horn has recently claimed for this later definition the priority, and proposes to change the name used by all other describers. I doubt, however, whether this course could be justified, even by the law of priority. Chevrolat, in 1838, may be said to have characterized *Amphionycha* when he defined the genus *Pyrobolus* (giving *Saperda fumigata*, Germar, as the type) and stated that all the other species belonged to *Amphionycha*. *Saperda fumigata*, however, is probably a true *Amphionycha*; and therefore *Pyrobolus*, established with positive characters, would be the prior name, had it not been previously used in Botany, and apparently withdrawn subsequently by its author. After this Leseleuc established the genus *Amphionycha* much more definitely (in 1844); for, although in describing and figuring *A. luctuosa* he did not give a generic formula, he mentioned all the generic characters of the insect; and, in fact, no subsequent author, except Leconte, has been in doubt as to the genus, taking *A. luctuosa* as its type.

The genus is distinguished from its allies by its linear form, vertical epipleuræ, carinated on their summit, and filiform antennæ, in which the third joint alone is conspicuously elongated, and none of the joints thickened or furnished with dense pencils of hair. *Zeale* was founded by its author on mistaken observation, the compact tomentum in the species concealing the carinæ, which, however, really exist.

1. **Amphionycha spectabilis.**

Saperda spectabilis, Drury, Ill. iii. p. 73, t. 48. f. 8, ♀[1].
Œdudes spectabilis, Thomson, Physis, i. 6, p. 199.

Hab. Mexico, Cordova, Tuxtla (*Sallé*); Honduras[1]; Guatemala, Panima, San Juan (*Champion*).—South America, Colombia.

In Mexican examples the white fascia of the forehead is dilated above in the middle, and extends in a point to the vertex. The white belts of the elytra vary in width and form, but they remain only two in number. Mr. Champion met with examples in which the white colour is partially or wholly changed to a beautiful rosy red.

2. **Amphionycha callizona.**

A. spectabili quam maxime affinis, differt elytris albo trifasciatis, fronte macula trilobata alba; elytris nigris, fasciis tribus albis, prima utrinque subter humeros curvata, secunda lata post medium, tertiaque angustiore apicali; abdominis segmentis postice cinereo marginatis.

Long. 6–8½ lin. ♂ ♀.

Hab. British Honduras, river Sarstoon (*Blancaneaux*); Guatemala, Cubilguitz (*Champion*).

3. **Amphionycha druryi.**

Œdudes druryi, Thomson, Physis, ii. p. 200 (1867).

Hab. Costa Rica (*Sallé, Van Patten*).

4. **Amphionycha bifasciata.** (Tab. XV. fig. 4.)

Amphionycha bifasciata, Bates, Trans. Ent. Soc. 1869, p. 386[1].

Hab. Nicaragua, Chontales (*Belt*[1], *Janson*).

Differs from *A. druryi* in the posterior yellow belt of the elytra being much more oblique, by the fine grey pile of the elytral surface, and the black margins of the yellow belts.

5. **Amphionycha pluricostata.**

Valde elongata et convexa, subtus nigra, supra macula frontali, vittulis quatuor verticis, thorace elytrorumque dimidio basali coccineis vel fulvis, thorace vitta dorsali et macula utrinque subbasali elytrorumque humeris nigris; capite valde angustato et retracto; thorace antice attenuato; elytris apice late rotundatis, dorso punctato-striatis, interstitiis convexis, lateribus valide bicostatis, costis parallelis a callo subfalcato humerali usque fere ad apicem excurrentibus; antennis nigris (♀), quam corpus multo brevioribus; pedibus nigris.

Long. 7½ lin. ♀.

Hab. Guatemala, Purula (*Champion*).

6. **Amphionycha obesa.**

♀. Valde elongata et convexa, piceo-fusca, abdominis segmentis tribus apicalibus cinereo-flavo tomentosis, fronte thoracisque vitta laterali lata (postice dilatata) cinereis; elytris sutura, margine laterali lineaque discoidali obscure fulvis; capite angusto, retracto, inter oculos concavo; thorace antice attenuato, medio utrinque paullulum tumido; elytris apicem versus late rotundatis margineque apicali breviter sinuato-truncatis, dorso subtilissime punctulatis, utrinque costulis duabus vix elevatis; antennis quam corpus multo brevioribus, nigris; femoribus basi pallidis.

Long. 10½ lin. ♀.

Var. Paullo angustior, nigerrima, thorace vitta lata laterali cinerea, cæteris ut in typo.

Hab. Mexico, Omealca (*Sallé*); var. Guatemala, Purula (*Champion*).

Both the examples above described appear to be females; the Mexican one bears the name in the Sallé collection of *A. collaris*, Chevr. The middle tibiæ are quite free from notch on the outer edge. Although evidently closely allied to *A. pluricostata*, and not generically separable from it, the lateral carinæ are but feebly elevated, and are obsolete beyond the middle of the elytra, and the punctuation of the surface is extremely minute and scattered.

7. **Amphionycha globicollis.**

A. obesæ affinis, sed differt thorace convexo et valde rotundato. Elongata, robusta, convexa, fulva, pectore abdomineque fuscescentibus, hoc segmentis 2°–4^{m} flavo-tomentosis ; capite angusto, retracto ; thorace disco convexo, lateribus medio valde rotundato-dilatatis, ante basin constricto et depresso, dorso fulvo, macula discoidali elongata nigra, lateribus flavis ; elytris apice conjunctim rotundatis, dorso plus minusve lineatim punctulatis, carinis duabus modice elevatis lateralibus tertiaque minus elevata interiore (versus discum) fulvis, vittisque duabus fuscis (altera prope suturam, altera inter carinas laterales); pedibus fulvis, fusco nebulosis.

Long. 9 lin. ♀.

Hab. Mexico (*Bates, ex coll. Hoppfner*).

8. **Amphionycha princeps.** (Tab. XV. fig. 2.)

Amphionycha princeps, Bates, Trans. Ent. Soc. 1872, p. 230.

Hab. Nicaragua, Chontales (*Belt*).

9. **Amphionycha scalaris.**

Zeale scalaris, Pascoe, Trans. Ent. Soc. ser. 3, v. p. 287, t. 20. f. 1[1].

Hab. Panama (*Boucard, M^{c}Leannan*), Matachin (*Schunke*).—South America, Colombia[1].

The lateral carina of the elytra is scarcely perceptible in well-preserved examples, owing to the dense tomentose clothing; hence the species was described by Mr. Pascoe as without carina, and as therefore forming a separate genus. The carina, however, is present, though less sharply elevated than in allied species.

10. **Amphionycha fraudatrix.**

Isomerida lineata ♂?, Bates, Trans. Ent. Soc. 1873, p. 233.

Isomeridæ albicolli ♀ similis. Cylindrica, nigro-fusca, cinereo-pubescens, subtiliter setosa, abdominis segmentis 3° 4°que (et 2° apice) flavo pubescentibus; capite thoraceque flavescenti-albo tomentosis, hoc medio vitta lata nigra; elytris sutura et marginibus anguste fulvis; pedibus rufo-fuscis; thorace ante basin rotundato-dilatato, antice gradatim angustato; elytris apice obtuse breviter truncatis, angulo exteriore dentiformi; dorso punctulato.

Long. 6 lin. ♂.

Hab. Nicaragua, Chontales (*Belt*).

I originally thought the present species might be the male of *Isomerida lineata*, of which Mr. Belt brought home females only; but having since seen males from Colombia, I find they agree with the female in their tufted antennæ. *A. fraudatrix* has the antennæ of a true *Amphionycha*.

ALAMPYRIS.

Corpus supra deplanatum, pilosum. Caput ♂ angustum, inter antennas concavum; ♀ interdum magnum, convexum. Antennæ tenues, corpore haud longiores, pilis longis et mollibus præcipue infra obsitæ. Thorax ante basin paullulum dilatatus, deinde ad apicem gradatim angustatus. Elytra planata, crebre

subtiliter punctulata, carina laterali interdum usque prope apicem integra, interdum obsoleta; epipleuræ parum elevatæ.

This genus consists of a number of species of small size and dusky colouring, bearing a striking resemblance to species of Glowworm of the genus *Photinus*. In some of them the abdomen beneath has several segments clothed with whitish pubescence, in imitation of the luminous organs of Lampyridæ; but this feature they possess in common with a large number of American Phytæciini of widely different genera. The elytral carinæ in some of the species are not distinct ribs, but only the edges of the angles formed by the vertical epipleuræ with the dorsal surface; and they disappear in some species, where the sides of the elytra are expanded. The males of some of the species closely resemble in form the genus *Alicia* (Thoms.), in which the antennæ are clothed above and beneath in the same way with long soft hairs; but they have not the almost completely divided eyes of that genus. One of the species was included in *Pannychis* by Thomson.

1. **Alampyris fuliginea.**

Angusta, linearis, fusco-nigra, opaca, capite (vertice excepto) thoracisque vitta laterali obliqua antice latiore albo tomentosis; antennis corpori longitudine æqualibus, dense pubescentibus, pilisque longis undique (præcipue infra) obsitis, articulis 3°–6^{m} basi testaceis; elytris apice rotundatis, carina laterali apicem fere attingente.

Var. *a*. Thoracis vitta lateralis flava; corpus subtus cinereo tenuiter pubescens.

Var. *b*. Thoracis vitta lateralis ut in typo; sed elytrorum margo lateralis pallidus et cinereo pubescens.

Var. *c*. Thorax et vertex (medio nigro excepto) testaceo-rufi.

Var. *d*. Thoracis vitta lateralis obsoleta; prosternum ante coxas album.

Long. 3–4 lin.

Hab. Mexico, Parada, Guanajuato (*Sallé*); var. *a*, Cuernavaca; var. *b*, Juquila; var. *c*, Parada.

2. **Alampyris curta.**

A. fuliginea latior, linearis, nigra, capite et thorace albo-tomentosis, thorace medio et vertice interdum macula triangulari nigris, vel thorace nigro vitta laterali alba: antennis utroque sexu quam corpus multo brevioribus, griseo-nigris, articulo tertio basi testaceo; elytris deplanatis, carina laterali usque fere ad apicem extensa, epipleuris modice elevatis, apice obtuse rotundatis; corpore subtus pedibusque nigris subnitidis.

Long. 4½ lin. ♂ ♀.

Hab. Mexico, Capulalpam, Puebla, Oaxaca (*Sallé*).

I have adopted the specific name attached to specimens received some years ago from Deyrolle of Paris.

3. **Alampyris nigra.**

A. fuliginea quoad formam similis, elytris valde deplanatis, sed medio longitudinaliter paullulum elevatis. Nigra, fasciola subter oculum alba; antennis brevibus, articulo tertio versus apicem gradatim subincrassato,

articulis a 3° basi testaceis; elytris versus apicem paullo angustioribus, carina laterali usque fere ad angulum suturalem prolongata.

Long. $4\frac{1}{2}$ lin. ♂?

Hab. Mexico, Oaxaca (*Sallé*).

4. **Alampyris melanophiloides.**

Pannychis melanophiloïdes, Thomson, Physis, ii. p. 197.

Hab. Mexico, Cordova.

According to the description, this must be a species closely allied to *A. nigra*, differing chiefly in the front of the head having a fulvous arcuate spot and the cheeks being yellow-spotted.

5. **Alampyris photinoides.**

Facie gen. *Photini* Lampyridarum. Lineari-oblonga; elytris postice paullo dilatatis, lateribus subexplanatis; nigra, subtiliter cinereo pubescens, abdominis segmentis 4°, 5° et 3° apice thoracisque lateribus albo tomentosis; antennis corpore brevioribus, supra minus pilosis, nigris, scapo infra articulisque 2°–10^{m} basi pallide testaceis; capite ♀ majore, occipite valde convexo, vertice albo, medio macula nigra fulvo marginata, genis fronteque pallide variis; thorace transverso, prope basin perparum rotundato-dilatato; elytris apice singulatim fere acuminatis, carina laterali obtusa pone medium evanescente, deinde lateribus subexplanatis; pedibus cinereo-fuscis, femoribus rufo-fulvis.

Long. 5 lin. ♀.

Hab. Guatemala, Zapote (*Champion*).

6. **Alampyris mimetica.**

A. photinoidi similis, at differt elytrorum carina multo breviore elytrisque mox pone humeros dilatato-explanatis. Nigro-fusca, breviter pilosa, abdominis segmentis 4° et 5° (fere nudis) pedibusque testaceo-albis; capite thoraceque supra albo tomentosis, macula verticis triangulari vittaque thoracis dorsali fuscis; thorace mox ante basin paullo dilatato; antennis dimidio basali fulvo-testaceis, articulis 1°–6^{m} apice, cæteris totis fuscis; elytris singulatim subacutis.

Long. 4 lin. ♂.

Hab. Mexico, Cordova (*Sallé*).

7. **Alampyris marginella.**

A. photinoidi iterum similis, sed elytrorum carinis nullis, epipleuris subverticalibus, marginibus fere rectis haud explanatis. Oblongo-linearis, dense breviter pilosa, fusco-nigra, abdominis segmentis 4° et 5° flavo-testaceis et flavo pubescentibus; pedibus antennisque fuscis; his articulis 2°–7^{m} basi testaceis; capite thoraceque flavo-tomentosis, verticis macula vittaque thoracis lata nigro-fuscis fulvo limbatis; thorace mox pone medium perparum rotundato; elytris apice singulatim minus acute rotundatis, nigro-fuscis, sutura et margine anguste cinereo-fulvis.

Long. $4\frac{1}{4}$ lin. ♂.

Hab. Mexico, Cordova (*Sallé*).

8. **Alampyris quadricollis.**

A. marginellæ similis, at thoracis lateribus rectis, abdomine nigro, etc. Angusta, dense breviter pilosa, fusco-nigra, capite et thoracis vitta laterali (antice valde dilatata) cinereo-albo tomentosis, illo macula circumoculari

fusca; antennis fuscis, articulis 3o–6m basi testaceis; elytris ut in *A. marginella* fere rectilinearibus, sed carina laterali magis distincta epipleurisque magis verticalibus, apice rotundatis, nigro-fuscis, marginibus anguste cinereo-flavis.

Long. 3½ lin. ♂?

Hab. Mexico, Juquila (*Sallé*).

ISOMERIDA.

Isomerida, Bates, Ann. & Mag. Nat. Hist. ser. 3, xvii. p. 373.

The chief character which distinguishes this genus from *Amphionycha* lies in the nature of the hair fringe on the under surface of the antennæ. Instead of forming a more or less regular range of fine cilia, it is more or less condensed into tufts under each joint, especially of the basal half. The third joint is never so long relatively as in *Amphionycha* and allied genera, but is in nearly all species but little longer than the fourth. The elytral carina forms a prominent rib.

About eight species are known, chiefly from Tropical South America.

1. **Isomerida subdilatata.** (Tab. XV. fig. 9.)

Isomerida subdilatata, Bates, Trans. Ent. Soc. 1872, p. 229[1].

Hab. Nicaragua, Chontales (*Belt*[1], *Janson*).

2. **Isomerida lineata.**

Isomerida lineata, Bates, Trans. Ent. Soc. 1873, p. 232[1].

Isomerida albicollis, id. ib. 1872, p. 229[1] (nec Castelnau).

Hab. Nicaragua, Chontales (*Belt*[1]).—South America, Colombia[1].

3. **Isomerida picticornis.** (Tab. XV. fig. 10.)

Isomerida picticornis, Bates, Trans. Ent. Soc. 1872, p. 229.

Hab. Nicaragua, Chontales (*Belt*).

HEMILOPHUS.

Hemilophus, Serville, Ann. Soc. Ent. Fr. 1835, p. 39; Lacordaire, Gen. Col. ix. p. 885.

The second and third joints of the antennæ in this genus are thickened; and the dense and long-hair clothing of the under surface is confined to these joints and, in less degree, to the scape, the remaining joints having the usual fine hairs. The elytral epipleuræ are high; and the carina forms a distinct rib. About a dozen species are known, all Tropical-American.

1. **Hemilophus prolixus.** (Tab. XV. fig. 20.)

Hemilophus prolixus, Bates, Trans. Ent. Soc. 1872, p. 229.

Hab. Nicaragua, Chontales (*Belt*).

2. **Hemilophus longulus.**

Elongatus, subgracilis, postice parum ampliatus, breviter sparsim erecte pilosus, niger; capite thoraceque supra fulvo-ochraceis, illo postice vittis quinque, hoc vitta dorsali alteraque latiore laterali nigris; elytris vel totis fulvo-ochraceis vel nigris dimidio basali (aut plaga triangulari humerali tantum) flavo-ochraceo, apice rotundatis, dorso lineatim punctulatis, costulis duabus dorsalibus modice, carina laterali (apicem fere attingente) valde elevata, epipleuris (parte juxta basin excepta) declivibus; antennis nigris, articulis basi testaceis, 1°, 3°, et 4° dense pubescentibus, infra penicillatis; pedibus fuscis, basi pectoreque medio testaceis.

Long. $4\frac{1}{4}$–$5\frac{1}{2}$ lin. ♂ ♀.

Hab. Mexico, Cordova (*Sallé*, *Höge*), Jalapa (*Höge*).

3. **Hemilophus varians.**

Latius, postice dilatatus, breviter erecte pilosus, niger (pro- et mesosterno fulvis); capite thoraceque supra fulvis, illo postice vittis tribus, hoc vitta dorsali (interdum valde dilatata, alias obsoleta) alteraque laterali nigris; elytris apice late rotundatis, margine apicali plus minusve breviter sinuato-truncato, dorso bicostatis interstitiis irregulariter punctatis, carina laterali usque fere ad apicem continuata, lateribus postice explanatis; elytris totis fulvis, vel nigris dimidio basali fulvo vel humeris fulvis; femoribus basi testaceo-fulvis.

Long. 3–6 lin. ♂ ♀.

Hab. Mexico, Cordova, Tuxtla (*Sallé*); Guatemala, Capetillo, Zapote, Purula, Cubilguitz, Senahu (*Champion*).

Very similar to *H. longulus*, but broader and more robust, with the sides of the elytra flattened out (especially in the female) from before the middle, the explanated margin increasing slightly in width until near the apex, where it is rounded off towards the suture, the edge presenting a shallow sinuation before the sutural angle is reached. Besides this difference in general form, there is a difference in the short black stripes of the occiput, *H. longulus* having a distinct narrow vitta on each side separate from the broad black stripe of the cheek, which vitta is wanting in all the numerous varieties of *H. varians*. The punctuation of the interstices between the dorsal raised lines of the elytra is irregular in *H. varians*, and arranged in lines in *H. longulus*. *H. varians* appears to be a common insect in Guatemala, and has been sent home in great plenty by Mr. Champion. I have adopted the MS. name given to it in the Sallé collection.

TYRINTHIA.

Tyrinthia, Bates, Ann. & Mag. Nat. Hist. ser. 3, xvii. p. 371 (1866).
Cyphometopus, Thomson, Physis, ii. p. 192 (1868).

The elytra in this genus are depressed, and more or less dilated towards the apex, with epipleura, of small elevation, not separated from the dorsal surface by distinct carinæ. The antennæ have the third joint greatly elongated and, with the base only of the fourth, slightly thickened and densely fringed with long hairs. The typical species have in the male the forehead very prominent, and cleft in the middle by a longitudinal furrow, giving it a bicuspid appearance as seen from above; but in some species this striking peculiarity is much less developed, and in others the forehead is simply convex,

with a deep depression between the antennæ. The same instability is seen in the similar structure which distinguishes the genus *Phœbe*.

Eight species of *Tyrinthia* are known, nearly all from Brazil.

1. Tyrinthia xanthe.

Elongata, gracilis, vix convexa, postice paullulum ampliata, sparsim setosa; subtus nigra griseo sericea, supra ochraceo-fulva, aureo pubescens, vittis occipitis tribus, altera thoracis dorsali abbreviata, vagis, fuscis; capite inter antennas late concavo, fronte (♀) convexa simplici; thorace subtrapezoidali, basi latiore (angulis acutis), deinde usque ad apicem gradatim fere recte angustato; elytris apice singulatim rotundatis, dorso striato-punctatis, costulis duabus dorsalibus, carina laterali valde obtusa; epipleuris versus basin subverticalibus, versus apicem lateribus paullo dilatato-explanatis; pedibus nigris; antennis nigris, articulo 5° 4°que basi fulvis, scapo gradatim incrassato, articulo tertio valde elongato, cum quarti basi dense nigro penicillato.

Long. 4 lin. ♀?

Hab. NICARAGUA, Chontales (*Belt*).

The specimens collected by Mr. Belt appear to be females; possibly the male may have the forehead bicuspid, as in other species of the genus.

2. Tyrinthia lycinella.

T. xanthe proxime affinis, at postice magis ampliata elytrisque dimidiis apicalibus nigris; depressa, breviter pilosa, subtus nigra griseo sericea, pro- et mesosterno fulvis, supra ochraceo-fulva, elytrorum dimidiis apicalibus nigris; vertice macula, altera utrinque post oculum lineolaque abbreviata thoracis nigris; capite inter antennas late concavo, fronte convexa; thorace angulis posticis acutis, ante basin paullo angustato, apud medium iterum dilatato; elytris apice rotundatis, dorso regulariter usque ad apicem punctato-striatis, carina laterali valde obtusa; antennis nigris, articulo 5°, 4° apice, 6°que basi fulvis, scapo medio intus dilatato, articulo tertio cum quarti basi paullo incrassato, undique longe piloso sed vix penicillato; pedibus nigris, femoribus 4 anticis (cum coxis) fulvis.

ong. $3\frac{3}{4}$ lin. ♀?

Hab. COSTA RICA (*Dr. Horn, coll. Bates*).

MALACOSCYLUS.

Malacoscylus, Thomson, Physis, ii. p. 192.

The third antennal joint alone in this genus is clothed with long hairs. The elytra are convex, with high vertical epipleuræ, limited above by a strongly-elevated carina. Two species have been described, one from Brazil and one from Colombia; but many more exist unpublished in collections from Tropical South America.

1. Malacoscylus humilis.

Angustus, gracilis, niger, pilosus, fronte genibus prosternoque ante coxas albo tomentosis, vertice vittis duabus postice divaricatis et per thoracis latera usque ad elytrorum humeros continuatis aurato-fulvis; antennis nigris, articulo quarto fulvo-testaceo; thorace subcylindrico, basi latiore; elytris prope apicem perparum ampliatis, apice obtuse rotundatis, dorso punctulato-striatis, sutura et costulis utrinque duabus elevatis, carina laterali acutissima; pedibus nigris.

Long. 4 lin. ♂.

Hab. MEXICO, Zacatepec (*Sallé*).

LYCIDOLA.

Lycidola, Thomson, Syst. Ceramb. p. 125; Bates, Ann. & Mag. Nat. Hist. ser. 3, xvii. p. 368; Lacordaire, Gen. Col. ix. p. 884.
Spathoptera, Bates, Ann. & Mag. Nat. Hist. ser. 3, xvii. p. 369 (nec Serville).

Nine species of this very remarkable genus are known, all, with the exception of the one recorded below, South-American. The dilatation of the elytra and the imitation of the genus *Lycus* in form and colouring, which form so peculiar a feature in the group of genera to which it belongs, here reach their maximum. The remarkable width of the prosternum, a character foreign to the whole series of American Phytæciini, is shown only in two of the species, *L. simulatrix* of the Amazons, and the following, *L. belti.* It is not noticeable to any thing like the extent, as Lacordaire justly pointed out, in *L. togata.* I have consequently been obliged to include in the genus two species from the Amazons which resemble *L. togata* in this respect, and which I had referred to Serville's genus *Spathoptera.*

1. **Lycidola belti.** (Tab. XV. fig. 1.)

Lycidola Beltii, Bates, Trans. Ent. Soc. 1872, p. 228.

Hab. NICARAGUA, Chontales (*Belt*).

NOTE.—During the progress of the above work a large amount of fresh material has been received, contained chiefly in the rich private collection of M. Sallé (ceded to Mr. Godman) and in successive arrivals from Mr. Champion and other collectors. As will have been observed, many of the new genera and species thus obtained have been incorporated since the commencement of the Lamiidæ; the equally numerous novelties in the earlier families, with rectifications of synonymy and additional notes on the geographical distribution of the species, will form the subject of a Supplement.

SUPPLEMENT.

THE very large accessions of new material received during the progress of the foregoing work remain to be passed in review. It is in the two earlier families (Prionidæ and Cerambycidæ) that the greater number of additions will be found, far exceeding the original enumeration; this is due chiefly to the circumstance that the great Mexican collections of M. Sallé and Herr Höge were not received until we had reached nearly the end of the Cerambycidæ. The later labours of Mr. Champion, more especially in the State of Panama, have also proved to be very productive in new species of Longicornia. New information regarding distribution, corrections, and synonymical notes relating to previously recorded genera and species, are also included.

PARANDRA (p. 1).

Parandra glabra (p. 2).

To the localities given, add:—MEXICO, Chinantla, Juquila (*Sallé*); PANAMA, Volcan de Chiriqui (*Champion*).

Parandra polita (p. 2).

To the localities given, add:—MEXICO, Jalapa (*Höge*); GUATEMALA, Las Mercedes alt. 3000 feet, Mirandilla, El Reposo, El Tumbador, Pantaleon (*Champion*); PANAMA, Volcan de Chiriqui, 2500 to 4000 feet, Bugaba (*Champion*).

Varies in size from 7 to 15 lines. The males show two tolerably well-defined grades in the development of the mandibles; the fully developed, larger-sized individuals have a very broad basal tooth, a sharp triangular median tooth, and a bifid apex; the less developed and smaller individuals have no distinct basal tooth, the mandible being simply broader at the base as far as the median tooth, which is much smaller than in the larger form. Chiriqui specimens differ from the Mexican and Guatemalan form in the obtuser, sometimes quite rounded, hind angles of the thorax; but this character is not constant, and examples occur in which the angles are prominent (*i. e.* preceded by a short sinuation on the sides) on one side of the thorax and rounded on the other. The Chiriqui form is also distinguished by the presence of a not very sharply incised groove separating the forehead from the epistome or clypeus; this, too, is far from being a constant difference.

Parandra angulicollis (p. 2). (Tab. XVI. fig. 1, ♂.)

To the localities given, add:—MEXICO, Jalapa (*Flohr*); GUATEMALA, Senahu, San Juan in Vera Paz, Chacoj, Pantaleon, Sinanja, Sabo (*Champion*); COSTA RICA (*Van Patten*); PANAMA, Volcan de Chiriqui (*Champion*).

5. **Parandra lata.** (Tab. XVI. fig. 2, ♀.)

♀. *P. brunneæ* et *P. angulicolli* affinis, sed multo latior præcipue thorace relative majori, latissimo. Fusco-rufa passim sat confertim punctulata, nitida, epistomate medio producto lato obtuso; antennis brevibus, articulis apice intus haud productis, 11° ovato apice subobtuso; thorace quam elytra latiori, angulis anticis nullomodo productis, posticis rectis, lateribus mox ab angulis anticis dilatato-rotundatis, prope basin sinuatis; paronychiis unisetosis.

Long. 10 lin. ♀.

Hab. MEXICO, Cordova (*Sallé*).

One example in the Sallé collection, with the MS. name "*P. lata* (Chevr.)" attached.

ERICHSONIA (p. 3).

Erichsonia dentifrons (p. 3).

To the localities given, add:—MEXICO, Las Vigas (*Höge*), Puebla (*Flohr*); GUATEMALA, Quiche Mountains, alt. 7000 to 9000 feet (*Champion*).

PSALIDOGNATHUS (p. 3).

Psalidognathus modestus (p. 3).

Psalidognathus mygaloïdes, Thomson, Arcana Nat. p. 41 (1859), ♂; Typi Cerambycidarum Mus. Thoms. (1878), p. 9.

Psalidognathus wallisi, Taschenberg, Zeitschr. gesammt. Naturwissensch. n. s. i. 1870, p. 191[1].

Psalidognathus batesi, Thomson, Typi Cerambycid. p. 9[2].

To the localities given, add:—PANAMA[2] (*Boucard*), Volcan de Chiriqui, alt. 5000 feet (*Champion*).

A male specimen in the Sallé collection bears a label in M. Sallé's handwriting "*Psalidognathus mygaloïdes*, Thoms.,=*P. wallisi*, Taschenb.;" and M. Thomson himself in his 'Typi Cerambycidarum' admits this probable identity. The description of Taschenberg certainly fits the present species; and Thomson's *P. batesi* applies fairly well to the larger individuals which seem to prevail in Chiriqui and in Costa Rica. The only point on which I have some doubt is the carinated upper surface of the 4–11 antennal joints which Thomson attributes to his *P. batesi*, but which I fail to find in the long series of examples examined. The carinæ, which limit the sensitive cavities of the *sides* of the joints, and which become more and more dorsal as the cavities increase in size from joint to joint, become visible from above only with the seventh joint; if the joints, however, were a little twisted, as they are liable to be in badly preserved specimens, they might appear to be dorsal. None of the other

characters mentioned as distinguishing *P. batesi* from *P. wallisi* are valid. The mandibles of the male show grades of development nearly as they do in most male Lucanidæ, and the spines of the thorax vary in a singularly abrupt way; though the examples in which the anterior angles are rounded, or some of the lateral spines fail, are rare. It is the same with the spines of the crown, so distinctive of this group of *Psalidognathus*; they are liable to become much reduced or disappear altogether.

Whether our species is really the *P. modestus*, Fries, or one of the very nearly allied species found in the Cauca valley, must remain at present doubtful. But it is extremely probable that these nearly allied forms are varieties of one and the same, though they differ much in the female, the male offering no marked difference. The singular *flattened* antennæ of the male, which M. Thomson makes a distinguishing feature of *P. limbatus*, is probably only an aberration, as antennæ still more remarkably flattened occur on an undoubted example of *P. modestus* taken by Mr. Champion on the Volcan de Chiriqui. Under these circumstances, and considering that the present species or race is the most widely distributed of the group, it will probably be found that *P. modestus*, Fries, is the correct name for it.

PRIONUS (p. 4; to follow the genus *Psalidognathus*).

Prionus, Geoffroy, Hist. Ins. d. environs d. Paris, p. 198; Lacordaire, Gen. des Coléopt. viii. p. 60.

A well-known genus, widely distributed over the north-temperate zone, one of the species occurring in the British Islands. A species is recorded from Madagascar and another from Australia; but temperate North America furnishes a greater variety and number of forms than any other part of the world of similar area. About twenty-five species belong to the genus. The two following are the first known to occur south of the United-States borders:—

1. Prionus flohri.

P. californico affinis, sed multo angustior antennisque longioribus et gracilioribus 13-articulatis. Piceo-niger, pectore dense flavo-piloso, palpis et abdomine rufis; capite inter oculos convexo et sulcato, post oculos transversim depresso; antennis articulis 3°–13ᵐ angustioribus, apice utrinque longe productis; thorace fere sicut in *P. californico*, sed angulis anticis et posticis longius et acutius spinosis, spina mediana plus minusve hamata; elytris crebre et grosse (fere sicut in *P. brevicorni*) punctato-rugosis.

Long. 1 in. 4 lin. ad 1 in. 8 lin. ♂ ♀.

Hab. Mexico, San Juan Tumbio, under pine-logs (*Flohr*).

Apparently allied to *P. curvatus*, Lec.; but the elytra more strongly sculptured and the antennæ differing in the number of the joints.

2. Prionus mexicanus.

P. californico affinis, sed differt inter alia antennis 14-articulatis; a *P. flohri* differt antennis brevioribus et multo crassioribus. Nigro-piceus, interdum partim castaneo-fuscus, subtus rufior; antennis latis, brevibus

et robustis (♂ ♀), 14-articulatis, art. 14° appendiculato; oculis haud prominentibus, collo latiori; thorace sicut in *P. californico*, sed differt margine antico medio sat profunde emarginato, angulis posticis productis sed vix spinosis; elytris crebre intricato-rugulosis et punctulatis; tibiis multo grossius quam in *P. flohri* granulatis.

Long. 1 in. 6 lin. ad 1 in. 9 lin. ♂ ♀.

Hab. MEXICO, Ciudad in Durango, 8100 feet (*Forrer*).

Resembles *P. flohri*; but certainly distinct, not only in the number of antennal joints in both sexes and the shorter and broader joints of the male, but in the form of the thorax in both sexes. In *P. flohri* the front edge is nearly straight, or describes a single gentle curve from spine to spine; whilst in *P. mexicanus* (in both sexes) it is trisinuate, the middle sinuation remarkably deep. The hind margin shows also a striking difference, being strongly bisinuated in *P. mexicanus*, so that the middle part forms a broad lobe; whilst in *P. flohri* it is nearly straight, but abruptly sinuate from the angle to the long and sharp basal spine. The head in *P. mexicanus* is remarkably narrow, the eyes being not prominent, and the neck thick and broader than the part across the eyes.

PITHOCLES (p. 4).

Pithocles procerus (p. 4). (Tab. XVI. figg. 3 ♂, 4 ♀.)

To the locality given, add:—MEXICO, Misantla (*Höge*), Juquila (*Sallé*); GUATEMALA (*Sallé, Sarg*), Coban (*Champion*).

DEROBRACHUS (p. 4).

Derobrachus longicornis (p. 4).

Derobrachus longicornis, Bates, Trans. Ent. Soc. 1872 (nec 1869 ut supra citat.), p. 166.

To the locality given, add:—GUATEMALA (*Sallé*), El Reposo (*Champion*); COSTA RICA (*Sallé*); PANAMA (*Boucard*), David, Volcan de Chiriqui (*Champion*).

The male only of this species has been described. It is a much-elongated species, with elytra narrow, nearly parallelogrammical (*i. e.* scarcely at all dilated at the sides before the middle), and the surface chestnut-brown, silky, impunctate except the scabrous shoulders; the thorax rather closely rugulose-punctate and *pubescent*; the antennæ longer than the body, with the groove of the third joint extending only half its length, the rest, like joints 4–11, being densely strigose.

♀. Nigra, aut castaneo-fusca, sericeo-nitens vel subopaca; antennis corporis dimidium attingentibus et articulis 1°–7ᵐ supra lævibus, 8°–11ᵐ crebre strigosis; thorace nudo.

Long. 20–28 lin.

Var. ♂. Antennarum articulo 3° sine sulco.

Hab. GUATEMALA (*Sallé*). One example.

Var. ♂. Elytris subtiliter punctulatis.

Hab. GUATEMALA, El Reposo (*Champion*). One example.

The eyes in the male above approach usually to within three fourths of a millim., in the female to $1\frac{1}{2}$ millim.; but in one of Mr. Belt's male examples from Chontales they approach much more closely, viz. one third of a millim.

1 (A). **Derobrachus sulcicornis.** (Tab. XVI. figg. 5 ♂, 6 ♀.)

Derobrachus sulcicornis, Leconte, Journ. Ac. Phil. ser. 2, vol. ii. p. 110, note (1852)[1].

Hab. MEXICO, Puente Nacional [1], Orizaba (*Sallé*), Villa Alta[1] (*Sturm coll.*).

Differs from *D. longicornis* in the sides of the elytra being widely dilated from behind the shoulders to the middle, their surface being more distinctly, but still vaguely, furrowed and obtusely costate, and in the thorax being faintly rugulose punctured, nearly smooth on the disc, and apparently not pubescent. The antennæ are similarly sculptured, the sulcus of the third joint extending about two thirds its length; but they are decidedly shorter, not quite reaching the tips of the elytra.

A female example has rather smoother and more polished elytra than the male. The third antennal joint sulcated, in which it differs from *D. longicornis* (female). Leconte's description, "Nigro-piceus, thorace inæqualiter varioloso-punctato . . . elytris . . . basi punctatis humeris fere scabris," applies rather better to *D. inæqualis*, Bates, than to the present species. A specimen, however, in the Sallé collection is named *D. sulcicollis*, and there is no reason to doubt the correctness of M. Sallé's determination.

Derobrachus inæqualis (p. 4).

To the locality given, add:—MEXICO, Yucatan (*Boucard*), Cordova (*Sallé*), Misantla (*Höge*), Cerro Gordo (*Flohr*), Tehuantepec (*Sumichrast*).

The original description of this species given in Trans. Ent. Soc. 1872 (not 1869, as quoted by error, *suprà* p. 4), p. 167, was drawn up from what is now evident is a rare aberration: a single male of brownish coloration, with the middle thoracic spine aborted. In the large series received the colour is constantly sooty black, scarcely shining; and the thorax, short and broad as in *D. sulcicornis*, has on each side three very long and sharp spines equally as in that species, the apical one of which is, in a minority of individuals, subbifid. The thorax is much more coarsely punctured, and the elytra more strongly furrowed and costate and more distinctly punctured near the base than in *D. sulcicornis*. One female only has been received by Messrs. Godman and Salvin.

♀. Fuligineo-nigra, subopaca, thorace partim grossissime scabroso-punctato, elytris basi granulatim punctulatis, humeris grossius punctatis; antennarum articulo 3° acute sulcato.
Long. $2\frac{1}{4}$ in.

One example in the Sallé collection labelled "*Derobrachus nietoi*, Sallé."

2 (A). **Derobrachus granulatus.**

D. inæquali simillimus, sed differt elytris passim granulato-punctulatis; thorace fere lævi lateribus utrinque quadrispinosis.

Long. 1 in. 6 lin. ♂.

Hab. MEXICO, Guachinango (*Sallé*). One example.

The apical lateral spine of the thorax, which in *D. sulcicornis* and *D. inæqualis* is sometimes subbifid (*i. e.* presents on its anterior side a short appendicular tooth), is here developed into two nearly equal spines. Notwithstanding this character and the granulate punctuation of the elytra, *D. granulatus* may probably prove, on the evidence of further examples, only an extreme variety of *D. inæqualis*; and the smoother thorax points to the conclusion that all three (*i. e.* including *D. sulcicornis*) may be varieties of one and the same very variable species.

2 (B). **Derobrachus forreri.**

D. sulcicorni affinis, sed minus elongatus, elytrisque sicut in *D. longicorni* post humeros minus dilatatis. Elongato-oblongus, niger, elytris castaneo-fuscis; antennis brevioribus, articulo 3° usque fere ad apicem, 4°que breviter, sulcatis; thorace nitido vix punctulato, spinis lateralibus minus elongatis, prima bifida; elytris perparum sulcatis fere lævibus, basi vage punctulatis, humeris haud scabrosis.

Long. 1 in. 8 lin. ad 1–10 lin. ♂.

Hab. MEXICO, Presidio (*Forrer*). Three examples.

Agrees with *D. longicornis* in the form of the elytra, which, however, are relatively distinctly shorter; in sculpture they differ from the allied species in wanting the rough punctuation of the shoulders. The antennæ are short, scarcely three fourths the length of the elytra, and the fourth joint has a short sulcus. The thorax is nearly smooth, and the lateral spines are rather shorter than in *D. sulcicornis*, the apical one being in all three examples subbifid, *i. e.* bearing on its anterior side a short but acute appendicular spine. The eyes are approximated above nearly as in *D. longicornis*.

One specimen with rather more elongate elytra has almost exactly the form and appearance of a male example of *D. geminatus* in my collection from Arizona. Such individuals may be readily distinguished from *D. geminatus* by the closer and stronger striation of the antennal joints.

2 (C). **Derobrachus megacles.**

D. forreri affinis, sed differt elytris longissimis omnino punctato-coriaceis. Valde elongatus parallelogrammicus, niger; elytris castaneo-fuscis, abdomine rufo-testaceo; oculis supra latioribus et extus minus convexis; thorace nitido vix punctulato, spinis modice elongatis, apicali bifida; elytris crebre confluenter punctatis vel punctato-coriaceis, obsolete bicostatis; antennis quam corpus multo brevioribus, articulis 1°–2^{m} et 3° (breviter) sulcatis.

Long. 2 in. 7 lin. (elytr. 1 in. 11 lin.).

Hab. MEXICO (*Sallé*). One example.

The antennæ are four fifths the length of the body. The species has a peculiar facies, owing to the relative great length and parallelogrammical form of the elytra.

2 (D). **Derobrachus geminatus.**

Derobrachus geminatus, Leconte, Proc. Ac. Phil. vi. 1853, p. 233; Coleop. of Kansas and E. New Mexico, p. 19, t. 2. figg. 12 and 12 *a*[1].

Hab. NORTH AMERICA, Texas to Lower California[1].—MEXICO, Parras in Coahuila (*Dr. Palmer*).

This species differs from all the foregoing in the eyes being widely distant on the forehead in both sexes, in the head being not at all narrowed behind the eyes, and in the much finer and sparser raised striæ of the 4–11 male antennal joints.

Derobrachus apterus (p. 4). (Tab. XVI. figg. 7 ♂, 8 ♀.)

To the locality given, add:—MEXICO, Cerro del Gallego (*Sallé*), Jalapa? (*Flohr*); GUATEMALA (*Sallé*), Purula, Cerro Zunil (*Champion*).

On my pointing out that the male of this singular species was a great desideratum, Mr. Flohr made a special search for it, and at length succeeded in digging out from a dead tree several examples with the apterous females. A single male, perfectly similar to one sent me by Mr. Flohr, was taken also by Mr. Champion at Cerro Zunil. It differs from all other species *inter alia* by the hairy legs and the absence of grooves from the tibiæ, which are simply compressed.

♂. Elongatus, parallelogrammicus, castaneo-fuscus, oculis supra fere contiguis; antennis quam corpus longioribus, articulo 3° fere usque ad apicem sulcato, 4°–11^{m} crebre strigosis; thorace brevissimo, longe et acute spinoso, dorso erecte pubescenti creberrime et grosse confluenter rugoso, marginibus longissime fulvo-aureopilosis; elytris relative longissimis, creberrime et sat grosse intricato-rugosis; pedibus sat gracilibus fulvo-hirtis; pectore longe et densissime fulvo-aureo-piloso.

Long. 1 in. 9 lin. ♂.

The apical thoracic spine in the one example (Mexico) is bifid, in the other (Guatemala) perfectly simple. The female varies in a similar way, and in size ranges from 1 in. 5 lin. to 2 in. 10 lin.

5. **Derobrachus (?) cylindroidus.**

Hab. GUATEMALA, Purula (*Champion*).

A single female specimen, of doubtful genus, but clearly allied to *Derobrachus*. It is of similar elongate form to many *Derobrachi*, but rather more convex; hence more cylindrical, and the hinder margins of the elytra are thickened and rounded without the usual sutural spine. The whole upper surface is coarsely and densely sculptured. The eyes are distant above and narrow; the maxillary palpi greatly elongated, the labial palpi unfortunately broken; the thorax has only two lateral spines, but there is a prominence in the place of the third (middle) spine. The terminal joints of the antennæ have on each side an elongate sensitive fovea, and only the eleventh joint is striated above.

ORTHOMEGAS (p. 5; to follow the genus *Derobrachus*).

Orthomegas, Serville, Ann. Soc. Ent. Fr. 1832, p. 149.

A tropical American genus, of which three species only are known—one from South Brazil, a second from the Guiana region, and a third from the larger West-India islands.

1. Orthomegas cinnamomeus.

Cerambyx cinnamomeus, Linn. Mus. Lud. Ulr. p. 66; Syst. Nat. ed. xii. p. 623.
Prionus corticinus, Oliv. Ent. iv. no. 66, p. 21, t. 9. f. 34, ♀[1].

Hab. NICARAGUA (*ex coll. Cutter*).—SOUTH AMERICA, Cayenne[1], Amazons.

CALLIPOGON (p. 5).

Callipogon barbatum (p. 5).

To the locality given, add:—GUATEMALA, Cerro Zunil, El Tumbador, San Isidro, San Juan in Vera Paz, El Reposo, Paraiso, Coban (*Champion*).

A further series of examples from intermediate localities seems to confirm the specific distinctness of this form from *C. senex*; but the chief distinguishing feature lies less in the length of the mandibles of the fully developed males than in the presence of a longish basal tooth on the inner side of each mandible in a large male *C. barbatum*, and its absence in *C. senex* of the same development. The largest male in the series from Guatemala has the tooth, though its mandibles are nearly as long as in the largest male *C. senex*. A much larger and apparently more fully developed male from Chontales has very much shorter mandibles, similar, in fact, to males of the lower development in *C. senex*.

Callipogon senex (p. 6).

To the locality given, add:—MEXICO, Santecomapan (*Sallé*), Misantla (*Höge*); BRITISH HONDURAS, Belize, River Sarstoon (*Blancaneaux*).

Callipogon lemoinei (p. 6).

To the localities given, add:—PANAMA, David, Bugaba, 800–1500 feet (*Champion*).

This species, Mr. Champion informs me, is attracted by light; the few examples obtained were captured in this manner; in the forest he did not meet with it.

STRONGYLASPIS (p. 6).

Strongylaspis scobinatus (p. 6).

Thomson, in the original description of this species, makes particular mention of the spinose or (in one place) "subspinose" humeral angles of the elytra. As this feature was not repeated in M. Chevrolat's more careful subsequent description of the same

species from Cuba, I disregarded it in referring the Chontales specimens to *S. scobinatus*, in which there is no trace of humeral spine. A spine, or rather a small dentiform prominence, formed by the prolongation of the humeral angle of epipleural fold, does, however, exist in some examples, as I now find on examination of the additional material arrived since the early parts of the present volume were published. The minute dentiform process exists in a male example labelled "Guatemala" in the Sallé collection, and in another taken in British Honduras by Blancaneaux. As, however, no other difference of importance exists between these and Chontales examples, and the humeral projection is much less prominent in one of the two examples examined, I hesitate to consider them as separate species; the different forms of *S. scobinatus* must at present be classed as varieties as follows:—

S. scobinatus, forma typica. Elongato-subcylindricus, testaceo-rufus vel cinnamomeus, supra subtilissime et parum dense cinereo-argenteo-pubescens; elytrorum humeris tuberculo parvo armatis.

Hab. MEXICO (*ex coll. Sallé, sec. Chevrolat*); BRITISH HONDURAS, River Sarstoon (*Blancaneaux*); GUATEMALA (*Sallé*).

Var. *S. belti*. Elytrorum humeri omnino obtusi.

Hab. NICARAGUA, Chontales (*Belt, Janson*).—? WEST INDIES, Cuba (*Chevrolat*).

The following, from the different colour and greater density of its pubescence and other minor characters, seems to merit specific rank:—

1 (A). **Strongylaspis championi.**

Elongato-subcylindricus, cinnamoneus, pube subaureo-flavo dense vestitus; thoracis disco depresso vel concavo inæquali, lateribus multo subtilius denticulatis; antennarum ♂ articulo 3° breviori et rectiori, quam art. 4°–5^{m} conjunctis breviori; elytris prope scutellum solum asperato-granulatis ibique ♂ ♀ plagis brunneis nudis, humeris obtusis.

Long. 1 in. 5 lin. ad 1 in. 8 lin. ♂ ♀.

Hab. GUATEMALA, Cerro Zunil (*Champion*).

In large male individuals of *S. scobinatus* the third antennal joint is slightly thickened and curved, and considerably (about one fifth) longer than joints 4–5 taken together. In equally well-developed individuals of *S. championi* the same joint is straight and about one fifth shorter than 4–5 taken together.

3. **Strongylaspis graniger.**

Subcylindricus, rufescenti-fuscus; capite grosse confluenter punctato; thorace magis quadrato (antice minus angustato), dorso inæquali callis duobus nitidis, hic illic ruguloso et passim discrete nitide granulato; elytris passim æqualiter discrete et sat eleganter granulatis, nudis; antennis art. 1°–3^{m} grossissime scabrosis, 3° recto quam 4^{us}–5^{m} conjuncti breviori.

Long. 11 lin. ♂.

Hab. PANAMA (*Boucard*). One example.

In the granulation of the elytra, apparently resembling *S. costifer*, Thomson, from

Guiana, but our species presents no traces of the costæ which Thomson mentions as strongly developed in *S. costifer*.

Ergates corticarius, Erichson (Schomb. Reise, iii. p. 571), from British Guiana, is evidently a species of *Strongylaspis*, but is more nearly allied to *S. scobinatus*, the upper surface being "sehr fein gekornt," and the thorax "nach vorn geschmälert."

MALLODONOPSIS (p. 7).

Mallodonopsis mexicanus (p. 7).

To the localities given, add:—MEXICO, Orizaba (*Sallé*), Misantla (*Höge*); GUATEMALA, Cubulco (*Champion*); COSTA RICA (*Van Patten*); PANAMA, Bugaba (*Champion*).

Mallodonopsis corrosus (p. 7). (Tab. XVI. fig. 10.)

We now give a figure of this species.

APLAGIOGNATHUS (p. 7).

Aplagiognathus spinosus (p. 8).

To the locality given, add:—MEXICO, Parada (*Sallé*), Misantla (*Höge*).

Specimens in the Sallé collection bear MS. names by Sturm, "*Mallodon armatum*, *M. foveicolle*, and *M. lævicolle*," two forms of the male and the female being considered so many separate species.

Aplagiognathus hybostoma (p. 8). (Tab. XVI. fig. 9, ♂.)

Prionus subsulcatus, Dalman, Anal. Ent. p. 63 (1823)?

Agrees with Dalman's description in many important points, such as the shortness and thickness of the first antennal joint ("art. primus crassus obconicus") and the very thick mandibles surmounted at the base by a tubercle ("mandib. crassissimæ, basi tuberculo obtuso elevato armato"); but it differs in the mandibles being much shorter than the head, not "longitudine capitis," and apparently also in the outline of the thorax. Dalman's description has been overlooked by the compilers of the Munich catalogue, as well as by White and Lacordaire.

NOTHOPLEURUS (p. 8).

3. **Nothopleurus mandibularis.**

Mallodon mandibulare (p. 10).

Add to the synonymy:—*Mallodon* (*Nothopleurus*) *dentiger* (Leconte), Crotch, Check-list N. Am. Col. p. 82.

To the locality given, add:—NORTH AMERICA, California, Texas.—MEXICO, Presidio (*Forrer*).

Crotch placed this species in the genus *Nothopleurus*. It approaches, in fact, this genus very closely, the metathoracic episterna being slightly concave on their inner side; but the typical *Nothopleuri* have, in addition, the same parts very much narrowed, whilst in the present species they are but little narrower than in the genus *Mallodon*. The species, in fact, bridges over the difference between the two genera which Leconte (Class. Col. N. Am. 1873, part ii. p. 287), not knowing the typical species of *Nothopleurus*, declined to separate. *N. mandibulare* has, however, a further peculiarity in common with *Nothopleurus*, and which distinguishes the genus from *Mallodon*; this is the form of the hind angles of the thorax and the adjacent lateral margins; the margin is here obliquely sinuate, with a long spine anterior to and a shorter spine posterior (at the angle itself). *Stenodontes* in both sexes presents the same constant peculiarity of structure.

4. **Nothopleurus lobigenis.**

G. Stenodonti similis. Elongato-oblongus, niger, nitidus, mandibulis (♂) subrectis, valde elongatis, intus rufo-ciliatis prope apicem unidentatis, compressis, supra carina a basi curvata, extus verticalibus; genis prope mandibulas margine sinuatis infra acutis, deinde in laminam obliquam prolongatis, gula et mento profunde incavatis; partibus oris rufo-ciliatis; capite scabroso, medio discrete punctato; thorace quadrato, antice triangulariter emarginato, lateribus denticulatis ante angulum posticum spina longiori, deinde usque ad angulum margine obliquo lævi, angulo ipso acute spinoso, disco lævi (medio plagiatim punctato) lateribus grossissime scabroso et subsulcato; elytris pedibusque fere lævibus; antennis scapo sicut in *Mallodonti*, sed grosse punctato, art. 3° quam 4^us^ dimidio longiori.

Long. (excl. mandib.) 14 lin. ♂.

Hab. Mexico, Bay of Tehuantepec (*Dr. Baden, in coll. Bates*).

The narrow metathoracic episterna, with long incurved inner margins, show that this species belongs to the genus *Nothopleurus*; in the form and sculpture of the thorax it is very similar to *Stenodontes exsertus* (Oliv.), and the mandibles resemble those of *Stenodontes*. The prolongation of the lower margins of the cheeks, which go far to enclose the sunken throat and mentum, as in a box, are but an extreme development of what is seen in *Mallodon maxillosum* (F.).

MALLODON (p. 8).

Mallodon molarium (p. 9).

To the localities given, add:—Mexico, Presidio, Tres Marias Islands (*Forrer*), Jalapa, Paso del Macho (*Höge*); British Honduras, Belize, River Sarstoon (*Blancaneaux*); Guatemala, El Reposo, Pantaleon, Teleman (*Champion*); Panama, Bugaba (*Champion*).

Specimens of both this and *M. angustatum* are named *M. mexicanum* in the Sallé collection; a female specimen in the same collection is named by Sturm *M. chevrolati*, Dej.

Mallodon angustatum (p. 9).

To the localities given, add:—MEXICO, Tres Marias Islands (*Forrer*), Tuxtla (*Sallé*), Jalapa, Paso del Macho, Misantla (*Höge*); BRITISH HONDURAS, River Sarstoon (*Blancaneaux*); GUATEMALA, Mirandilla, Cerro Zunil, El Tumbador, Pantaleon, Panajachel (*Champion*); PANAMA, Tolé, Bugaba, Volcan de Chiriqui, Taboga Island (*Champion*).—SOUTH AMERICA, Venezuela.

TRICHODERES (p. 10).

Trichoderes pini (p. 10).

To the Mexican locality given, add:—Ciudad in Durango, 8100 feet (*Forrer*), San Andres de Arriba (*Sallé*), Jalapa (*Höge*).

2. **Trichoderes rugosus.**

A *T. pini* differt elytris castaneo-rufis, nitidis, grosse et crebre rugoso-punctatis; antennæ pedesque desunt. Long. 1 in. 6 lin.

Hab. GUATEMALA, Totonicapam (*Champion*).

One, unfortunately very imperfect, specimen of this undoubtedly distinct species.

TRAGOSOMA (p. 10; to follow the genus *Trichoderes*).

Tragosoma, Serville, Ann. Soc. Ent. Fr. 1832, p. 159.

Of this genus, hitherto known only from north temperate latitudes, one species from Europe and the other from Canada and the Northern United States, a species has been recently discovered by Mr. Buchan-Hepburn in Mexico. Unfortunately only one very imperfect specimen appears to have been found, too imperfect to describe even if it were new, which is somewhat doubtful.

1. **Tragosoma —— ?**

Hab. MEXICO, Pinos Altos in Chihuahua (*Buchan-Hepburn*).

Allied to the North-American *T. harrisi*.

MALLASPIS (p. 10).

1 (A). **Mallaspis lampros.**

M. moreleti proxime affinis, differt inter alia elytris minus crebre punctulato-coriaceis nitidis. Subolivaceo-ænea vel chalybeo-cyanea nitida, elytris utrinque prope apicem vitta lata obliqua minus nitida, in individuis æneis viridi margine iridicolori, in individuis chalybeis violacea, minus distincta vel obsoleta; capite et thorace sicut in *M. moreleti*, sed grossius et parcius punctatis; elytris haud profunde coriaceis nitidis; capite pedibusque nigro-violaceis; prosterno grosse et confertim punctato-rugoso.

♂. Antennæ sicut in *M. moreleti* filiformes, articulis 9°–11^{m} basi utrinque tuberculatis, articulo 3° elongato et incrassato depresso, 4° haud incrassato, lineari vix depresso, quam 4^{us} paullulum breviori.

♀. Antennæ articulis 3°–6^{m} fere linearibus perparum depressis, nec sicut in *M. moreleti* elongato-ovatis.

Long. 10–20 lin. ♂ ♀.

Hab. GUATEMALA, Cerro Zunil (*Champion*).

The punctuation on the broad oblique vitta near the apex of each elytron (most conspicuous in the dark brassy examples) is finer and closer than on the rest of the surface. A good many specimens were captured.

1 (B). **Mallaspis iris.**

Pyrodi marginato (White) simillima, sed differt scutello in ♂ densissime albescenti-pubescenti, in ♀ sparsim piloso subtilissime punctulato. Viridi-aurata, certo situ flavescens, elytrorum sutura et marginibus nitidius auratis vel igneo-cupreis; capite et thorace multo subtilius punctatis, illo oblongo, tuberibus antenniferis intus (in sulco lato) tuberculatis; hoc dorso plano, æquali, punctis discretis parum confluentibus, spina laterali magna, margine ab angulo antico usque fere ad spinæ apicem subrecto, subtilius serrato; scutello nullomodo rugoso-punctato; elytris oblongo-subtrigonis, subtilius quam in *P. marginato* alutaceis, prope basin grossius rugosis.

♂. Antennæ corpore haud longiores, basi æneæ, articulis 3°–7ᵐ subtilissime parum profunde et sparsim punctulatis rufis vel fulvis, apice nigro-æneis, 8°–11ᵐ nigris strigatis multo abbreviatis et paullo incrassatis, nec tuberculatis, art. 3° quam cæteri longiori et latiori; scutellum pilis albo-sericeis adpressis dense vestitum, linea mediana et apice lævissimis; pedes ænei, tibiæ testaceo-fulvæ, femora granulata; corpus subtus parce pubescens.

♀. Antennæ corpore multo breviores, filiformes, læves, cyaneæ, versus apicem incrassatæ, articulis 10°–11ᵐ brevissime ovatis; scutellum angustum subtilissime punctulatum parce pubescens; pedes cyanei, femora viridia; corpus subtus cupreo-auratum, segmentis viridi-marginatis, læve, coxis posticis solum pubescentibus.

Long. 11–16 lin. ♂.

Hab. GUATEMALA, Purula (*Champion*).

This interesting and most beautiful species bridges over the slight difference between the genera *Mallaspis* and *Pyrodes*. It resembles *P. marginatus* in colour, but differs both from that species and from *P. tenuicornis* in its very much finer sculpture, smoother surface, densely pubescent scutellum (at least in the male), and in its shorter, smoother, and otherwise coloured antennæ. From the male of *Pyrodes marginatus* it is further distinguished by the short, ovate, terminal joints of the antennæ, the three apical joints in *P. marginatus* being linear and having (like *M. moreleti* and *M. lampros*) an acute tubercle at their base. Five males and one female.

Mallaspis rhombodera (p. 10).

Mr. Champion reports that the apical half of the antennæ in this species is quite pale in the living insect.

Mallaspis præcellens (p. 11).

Mr. Champion took this species in great abundance in the forest region of Chiriqui, at altitudes of from 800 to 4000 feet. The thorax resembles that of *M. rhombodera* in the lateral explanated and serrated margin not commencing until some distance from the anterior angle; it is, however, narrower, and further differs from that species in having a very prominent and acute tooth just before the posterior angle. It varies in size from 10

lines to very nearly 2 inches. The male is always golden coppery, but the female varies from coppery to brassy-green, and in rare cases rich metallic blue.

6 (A). **Mallaspis insignis.**

M. paradoxæ proxime affinis et similis; differt pronoto ante spinam plus minusve distincte marginato margine neque ibi pluridenticulato; antennis et pedibus castaneo-fuscis vix violaceis.

Long. $1\frac{3}{4}$ in. ad $2\frac{1}{4}$ in. ♂ ♀.

Hab. Costa Rica (*Van Patten*); Panama, Volcan de Chiriqui (*Champion*).

This species would not have merited distinct mention as more than a geographical variety of the *M. paradoxa* from Chontales, if it had not presented a structural peculiarity of great systematic importance. Whilst *M. paradoxa* has no trace of the raised thoracic lateral margin which is one of the few distinctions of the *Prioninæ* as a subfamily, this evidently geographical variety of the same immediate stock has the margin distinctly indicated, and, further, denticulated, as is usual in *Mallaspis*. As evidence of its varietal condition, it is more or less developed in the different individuals. In sculpture and colour there is no difference between the two forms, except that in *M. insignis* the antennæ and legs are dull bronze-brown or castaneous, and present very little of the rich violet lustre of the same organs in *M. paradoxa*.

The locality Costa Rica, given on p. 11 for *M. paradoxa*, must be erased, and the specimen in question referred to the present species.

Mallaspis trichostetha (p. 11).

♀. Longior et convexior, nigra viridi-æneo tincta, supra et subtus glabra; supra grosse et confertim intricato-rugosa; thorace sicut in ♂ antice aurantiaco-ciliato, spina mediana elongata acuta; scutello glabro, subtiliter rugoso; metasterno et abdomine impunctatis nitidis, coxis posticis late distantibus; antennis filiformibus, art. 4°–11^{m} subæqualibus.

Long. 1 in. 6 lin. ad 1 in. 11 lin.

Received from Van Patten, from Costa Rica, together with numerous examples of the male. It has a totally different facies from the male, owing to its elongate-oblong and more convex form and glabrous scutellum.

PYRODES (p. 12).

Pyrodes marginatus (p. 12). (Tab. XVI. fig. 11.)

We now give a figure of this species.

HOLONOTUS (p. 12).

Holonotus lævithorax (p. 13). (Tab. XVI. fig. 15, ♂.)

To the locality given, add :—Mexico, Tuxtla (*Sallé*).

Holonotus latithorax (p. 13). (Tab. XVI. fig. 12, ♂.)

To the Mexican locality given, add :—Tuxtla (*Sallé*).

We now give a figure of this species.

4. **Holonotus minor.** (Tab. XVI. figg. 13 ♂, 14 ♀.)

Minor, relative angustior; fuligineo-niger, femoribus plus minusve rufis; supra confertim subconfluenter punctatus; thorace a medio usque ad apicem valde subrecte angustato, angulis posticis dentiformiter productis.

♂. Thorax medio discrete punctatus nitidus, lateribus depressis utrinque area elongata minute punctata opaca medio fere divisa; elytra versus apicem rufescentia; femora antica intus apice fulvo-aureo-pilosa.

♀. Thorax totus crebre confluenter punctatus, antice rectius et abruptius angustatus; elytra nigra.

Long. 1 in. ♂ ♀.

Hab. MEXICO, Santecomapam (*Sallé*).

Does not essentially differ from *H. lævithorax* either in form or colour. It is, however, very much smaller and narrower; the antennæ are longer and slender; and the thorax, especially in the female, much more strongly narrowed in front. The interruption in the septum which (in *H. lævithorax*) divides the opaque patch on the sides of the thorax into two areas is probably only accidental.

XENAMBYX (p. 14).

Xenambyx laticauda (p. 14). (Tab. XVII. fig. 3.)

This remarkable form escaped being figured in the former part of the present volume. We take advantage of the issue of supplementary plates to supply the omission.

SPONDYLIS (p. 14).

Spondylis mexicanus (p. 15). (Tab. XVII. fig. 1.)

To the Mexican locality given, add:—Las Vigas, Jalapa (*Höge*), Oaxaca (*Sallé*).

We now give a figure of this species.

CRIOCEPHALUS (p. 15).

Criocephalus mexicanus (p. 15).

To the Mexican locality given, add:—Las Vigas (*Höge*).

2. **Criocephalus asperatus.**

Criocephalus asperatus, Leconte, Col. of Kansas and E. New Mexico, p. 19[1].

Hab. NORTH AMERICA, Kansas[1], Nebraska.—MEXICO, Chiapas (*Sallé*), Jalapa (*Flohr*).

Mexican specimens agree precisely with others from Nebraska, with which I have compared them.

3. **Criocephalus productus.**

Criocephalus productus, Leconte, Journ. Acad. Phil. ser. 2, ii. p. 36[1].

Hab. NORTH AMERICA, Oregon.—MEXICO (*Flohr*).

One example received from Mr. Flohr, differing in no respect from others from the United States.

MALACOPTERUS (p. 15).

Malacopterus lineatus (p. 15).

Malacopterus mexicanus, Thomson (p. 15).

Ganimus vittatus, Leconte, Smithson. Misc. Coll. part ii. Long. p. 174[1].

To the localities given, add:—North America, California[1].—Mexico, Northern Sonora (*Morrison*), Cordova (*Sallé*), Misantla (*Höge*); British Honduras, Belize (*Blancaneaux*); Guatemala, Cerro Zunil, Torola, Pantaleon, Pampojilaj, Cahabon, Volcan de Atitlan (*Champion*); Panama, Volcan de Chiriqui (*Champion*).

Varies considerably in the form of the thorax, which, in the male, is relatively broader or longer, more or less rounded on the sides and narrowed in front; the sculpture and prominence of the raised dorsal line also varies. In size the species ranges from 6 to 15 lines.

Guérin's description fits the present species rather than a nearly allied one found also in Colombia and having similarly striped elytra, the words "extrémité des articles des antennes noirs" applying to it and not to the allied (apparently undescribed) species, in which the joints 3–5 are wholly blackish and remarkable besides in being compressed and grooved.

ATENIZUS (p. 15; to follow the genus *Malacopterus*).

Atenizus, Bates, Ent. Monthly Mag. iv. p. 28 (1867); Trans. Ent. Soc. 1870, p. 244.

The following is a second species of this singular genus, hitherto known only from the Amazons. Its affinities are in the direction of the genus *Œme*.

1. **Atenizus simplex.** (Tab. XVIII. fig. 2.)

A. laticipiti similis, sed differt antennis immaculatis pallidis articuloque tertio brevissimo quam 2^us^ vix longiori. Linearis depressus, pallide testaceus, undique (antennis pedibusque inclusis) densissime æqualiter suberecte pubescens; capite suborbiculato, oculis maximis, ante oculos brevissimo, tuberculo verticis magno antice gradatim declivi; thorace angusto, ovato, sat grosse sparsim punctato; elytris crebre punctulatis. Long. 3¼ lin. ♀?

Hab. Panana, Volcan de Chiriqui (*Champion*).

One example only, apparently a female.

SMODICUM (p. 15; to precede the genus *Tristachycera*).

Smodicum, Haldeman, Trans. Am. Phil. Soc. x. p. 38 (1847); Lacordaire, Gen. de Col. ix. p. 145; Leconte, Smithson. Misc. Coll. 265, part ii. p. 294.

A genus of narrow and flattened bark Longicorns, the affinities of which, as in *Parandra* and *Tapeina*, are disguised by the modifications due to their peculiar mode

of life. Its position was strangely misunderstood by Lacordaire, as Leconte has pointed out, who places it next the Asemini; it seems to me to belong to the same group as *Œme*. Ten species have been described, all, except two, from America, North and South, including the West Indies.

1. **Smodicum parandroides.** (Tab. XVIII. fig. 1.)

S. cucujiformi (Say) affine; differt capite latiori, ♂ ♀ post oculos oblique et valde angustato. Pallide testaceum, capite thoraceque subtilius punctatis, illo linea verticis tenui vix impressa, hoc breviter quadrato (♂ postice angustato) lateribus flexuosis, dorso depresso; elytris sat crebre sed discrete punctulatis.
Long. $3\frac{1}{4}$–$5\frac{1}{4}$ lin. ♂ ♀.

Hab. MEXICO, Jalapa (*Höge*); GUATEMALA, Zapote (*Champion*).

HAMMATICHERUS (p. 16).

Hammaticherus mexicanus (p. 16).

Hammaticherus castaneus (p. 16).

Hab. NORTH AMERICA, Lower California (*Leconte*).—MEXICO, Cordova (*Sallé*); BRITISH HONDURAS, Belize (*Blancaneaux*); NICARAGUA, Chontales (*Belt*).—SOUTH AMERICA, Brazil (*coll. Laferté*).

A specimen in the Sallé collection, agreeing perfectly with Chontales examples of *H. castaneus*, is named *H. mexicanus*, Thomson; and there can be no doubt it is really that species. The example on which *H. castaneus* was founded is from the Laferté collection and labelled "Brasilia"; it may be only a colour variety of the Guiano-Brazilian *H. batus* (Linn.).

3. **Hammaticherus batus.**

Cerambyx batus, Linn. Syst. Nat. ed. 10, p. 390, ed. 12, ii. p. 625; Oliv. Ent. no. 67, p. 10, t. 5. fig. 32[1].
Cerambyx datus, Linn. Mus. Lud. Ulr. p. 69.

Hab. PANAMA, Tolé (*Champion*).—SOUTH AMERICA, Trinidad[1]; Amazons, Pernambuco.

The Panama examples are not so dark as those from South America, the elytra being brownish black; they are, to the same extent, intermediate between *H. batus* and *H. mexicanus*.

4. **Hammaticherus plicatus.**

Cerambyx plicatus, Oliv. Encycl. Méth. v. p. 299; Ent. no. 67, p. 40, t. 18. fig. 136.
Cerambyx rufipennis, Gory, Guér. Icon. R. A. p. 226, t. 44. fig. 1*a*[1].

Hab. PANAMA (*Boucard*).—SOUTH AMERICA, Venezuela, Cayenne[1], Amazons.

The single Panama specimen is a male, larger than usual in the South-American

form, and with much shorter apical spines to the elytra. It agrees precisely in all other respects.

ATYLOSTAGMA (p. 16).

Atylostagma politum (p. 16).

To the locality given, add :—MEXICO (*ex coll. Turner*).

One specimen from the collection of the late Aspinall Turner. The genus is closely allied to *Xestia*, having the middle acetabula very nearly closed and the anterior acetabula scarcely angulated exteriorly.

XESTIA (p. 17).

4. **Xestia sanguinipes.**

X. nitidæ et *X. nigropiceæ* affinis; differt pedibus rufis, femoribus basi et apice tibiisque basi nigris; valde elongata, angusta, piceo-nigra, nitida, antennis ab articuli tertii apice fulvis; thorace antice angustato lateribus parum rotundatis, supra toto acute transversim strigoso; elytris postice paullo angustatis, apice utrinque longe bispinosis, supra subtilissime vermiculato-strigosis et minutissime punctulatis; prosterno ante coxas punctato-rugoso et transversim trisulcato.

Long. 1 in. 4 lin.

Hab. NICARAGUA, Javali (*coll. Bates*); PANAMA, Volcan de Chiriqui (*Champion*).

Two examples, agreeing in the above-described peculiarities. The sculpture of the elytra consists in extremely fine tortuous lines, in the centre of each area formed by which is a minute puncture. A similar sculpture is very faintly indicated in *X. nitida* and *X. nigropicea*, in which the elytra have a more glossy surface; in *X. spinipennis* (Serv.) they have a duller and silkier appearance.

AMPHELICTUS (p. 17; to follow the genus *Xestia*).

Gen. *Hesperophani* affinis; differt thorace spina laterali armato, etc. Corpus subcylindricum, nitidum pube erecta solum vestitum. Palpi breves, subæquales. Oculi maxime convexi, lobis inferioribus magnis, sphæricis. Antennæ ♂, corpore multo longiores, robustæ, articuli 3°–11^{m} fere æquales, late filiformes, subtus planati, sparsissime ciliati. Caput mox pone oculos magnos subito constrictum. Thorax relative parvus, transversus, spina mediana valida acuta, dorso trituberoso. Elytra apice rotundata, spina elongata suturali. Acetabula antica extus late angulata, intermedia aperta; prosternum postice subverticale.

The well-developed spines in the middle of the sides of the thorax distinguish this genus from *Hesperophanes* and its allies. The antennæ in the male are about one third longer than the body, robust and filiform to the apex; each joint would be cylindrical if it were not for a considerable flattening on the under surface.

1. **Amphelictus melas.**

Fusco-niger, nitidus, griseo suberecte pubescens, antennis ab articulo 3° sericeo-opacis; capite et scapo confluenter punctatis; thorace grosse discrete punctato (tuberibus sublævibus); scutello dense sericeo-pubescenti; elytris passim punctulatis.

Long. 10 lin. ♂.

Hab. MEXICO (*Sallé*).

GNAPHALODES (p. 17).

Gnaphalodes trachyderoides (p. 17).

To the localities given, add:—MEXICO, Tehuantepec (*Sumichrast*); BRITISH HONDURAS, Belize (*Blancaneaux*).

Var. *G. inermis.* Thorax inermis.

Hab. MEXICO, Presidio (*Forrer*).

One male example, differing in no respect from the type but by the complete absence of the lateral spines of the thorax.

PERILASIUS (p. 17).

Perilasius championi (p. 18). (Tab. XVII. fig. 2.)

We now give a figure of this species.

CHION (p. 18; to follow the genus *Perilasius*).

Chion, Newman, Entomologist, 1841, p. 23; Lacordaire, Gen. Col. viii. p. 285.
Cerasphorus (partim), Serville, Ann. Soc. Ent. Fr. 1834, p. 11.

A genus peculiar to North America, and not previously recorded as passing the southern boundary of the United States. One variable species only is known.

1. **Chion garganicus.**

Stenocorus garganicus, Fabr. Syst. Ent. p. 178.
Cerambyx garganicus, Oliv. Ent. no. 67, p. 39, t. 15. fig. 105.

Hab. NORTH AMERICA.—MEXICO, Northern Sonora (*Morrison*), Guajuco in Nuevo Leon (*Dr. Palmer*).

In the Mexican examples, at least the females, the external apices of the antennal joints 3–6 are more produced than in specimens of the same sex from Texas and South Carolina, with which I have compared them; they are not simply acute, but are prolonged into distinct spines. But, besides this variety, the following form also occurs in Mexico and has the appearance of a distinct species:—

Var. (?) *Chion ochraceus.* Elytra clare fulvo-ochracea, immaculata. Minus depressus, elytris relative brevioribus. Long. 11 lin. ♂.

Hab. MEXICO (*ex coll. A. Turner*).

This is not the similarly coloured variety of *C. garganicus* described by Fabricius as *Stenocorus rusticus,* the type specimen of which I have examined. The insect has a more cylindrical form, the elytra being more convex and relatively shorter.

PANTOMALLUS (p. 18).

Pantomallus fuligineus (p. 18).

To the locality given, add:—GUATEMALA, Cerro Zunil (*Champion*).

CHLORIDA (p. 18).

Chlorida cincta (p. 19).

To the localities given, add:—GUATEMALA, Purula, Las Mercedes, Volcan de Atitlan (*Champion*); COSTA RICA (*Van Patten*); PANAMA, Bugaba, Volcan de Chiriqui (*Champion*).

This species, Mr. Champion informs me, is frequently attracted by light.

EBURIA (p. 19).

Eburia stigmatica (p. 19).

Eburia perforata, Leconte (p. 19).

The only ground on which Leconte separated his species from *E. stigmatica*, as he himself states, was the presence of a spine at the sutural as well as at the exterior angle of the elytral truncature, Chevrolat expressly describing the elytra as having only an exterior spine at the apex and being "tronquées sur la suture." The examination of a numerous series of *E. stigmatica* from Mexico, named as such in the Sallé and other collections, proves, however, that Chevrolat made a mistake in his description or had a mutilated specimen before him; all have a distinct and long spine at the sutural angle. There remains therefore nothing to separate the two species. By the rules of priority, as at present understood, I presume the older name of the species must be retained in spite of the false description.

2 (A). **Eburia ulkei.**

Eburia ulkei, Bland, Proc. Am. Ent. Soc. i. p. 270; Leconte, Smiths. Misc. Coll. ii. (1873), p. 179[1].

Hab. NORTH AMERICA, California [1].—MEXICO, Ventanas (*Forrer*).

I obtained a specimen of this species (without locality) at the sale of the collection of the late Aspinall Turner. It is remarkable for its glabrous pitchy-brown upper surface.

Eburia blancaneauxi (p. 20). (Tab. XVII. fig. 5.)

We now take the opportunity of figuring this species.

4 (A). **Eburia patruelis.**

Cylindrica, fulvescenti-fusca, dense incumbenti-pubescens et passim erecte pilosa; thorace sparsim grosse punctato spina mediana sat magna acuta, tuberculo laterali anteriori prominenti, alteris (concoloribus) discoidalibus elevatis duobus callisque duobus prope marginem posteriorem; elytris obtusissime truncatis,

spina unica suturali elongata, maculis eburneis parvis utrinque quatuor sicut in *E. stigmatica* positis, sed medianis parvissimis.

Femora inermia; acetabula antica extus fere clausa; tubera antennifera supra obtusa.

Long. 10½ lin. ♀.

Hab. MEXICO (*Sturm, in coll. Sallé; Flohr*).

Two female examples. Named *E. patruelis* by Sturm in the Sallé collection.

4 (B). **Eburia rotundipennis.** (Tab. XVII. fig. 15.)

Cylindrica, castaneo-fusca, incumbenti-pubescens; thorace sparsim grossissime punctato vel foveato, spina mediana sat magna acuta, tuberculo laterali anteriori prominenti concolori; elytris apice singulatim rotundatis nullomodo truncatis spina suturali elongata, maculis eburneis angustis utrinque quatuor, duabus basalibus (quarum exteriori breviori) duabusque medianis (quarum interiori breviori).

Femora inermia; acetabula antica extus fere clausa; tubera antennifera supra acuminata.

Long. 10 lin. ♂.

Hab. MEXICO, Cordova (*Sallé*).

One example only. Extremely near *E. patruelis*, but distinct in the perfectly rounded apices of the elytra, of which the sutural angle has a long sharp spine. The specimen is much abraded, and probably to this is due the absence of erect hairs from the upper surface.

4 (C). **Eburia clara.** (Tab. XVII. fig. 16.)

Cylindrica, robusta, fuscescenti-fulva, subtiliter incumbenti-pubescens et breviter erecte pilosa, corpore subtus elytrorumque marginibus nigricantibus; antennarum scapo antice sulcato, grosse punctato, articulis 1°–7^m^ ciliatis; thorace sicut in *E. pedestre* haud profunde vermiculato-rugoso, spina laterali longissima et acutissima nigra, tuberculo utrinque ante spinam, alteris duabus antico-dorsalibus, nigris; elytris ♂ cylindricis, apice truncatis angulo suturali solum spinifero, utrinque lineis elevatis duabus, maculis sat elongatis geminatis quatuor, duabus basalibus approximatis æqualibus, duabusque medianis vix separatis quarum exteriori longiori.

Femora 4 posteriora breviter bispinosa; acetabula antica extus angulatim breviter aperta; tubera antennifera supra acuminata.

Long. 1 in. 2 lin. ♂.

Hab. MEXICO (*Sallé*).

Eburia pedestris (p. 20).

To the localities given, add:—GUATEMALA, Yzabal (*Sallé*); BRITISH HONDURAS, Belize (*Blancaneaux*); PANAMA (*Boucard*).

Var. *E. mutata.* Thorax ante spinam rotundato-dilatatus, spina mediana multo breviori et obtusiori; maculis eburneis exterioribus conspicue elongatis.

Hab. PANAMA.

One of the two Panama examples (a female) has the narrow thorax of the type form, in the other (a male) the thorax is much broader before the spine, a feature which, combined with the shortness of the lateral spine, the elongation of the exterior of the twin ivory spots (especially in the median pair), and the general more robust form, gives the insect a different appearance.

Eburia macrotænia (p. 20). (Tab. XVII. fig. 9.)

We now give a figure of this species.

Eburia championi (p. 20). (Tab. XVII. fig. 6.)

Examples of this species, since taken at Totonicapam in Guatemala, are smaller than the specimen described, viz. 10 to 12 lines. The femora towards the apex and the tarsi are sometimes blackish brown.

Eburia laticollis (p. 22).

To the locality given, add:—Mexico, Ventanas (*Forrer*).

14. **Eburia nigrovittata.**

Elongata, fuscescenti-fulva, grosse incumbenti-pubescens, thorace vittis (antice abbreviatis) tribus, callisque sex (quatuor anterioribus transversim positis unoque lineari utrinque laterali) nigris nitidis, spina laterali nulla ibique callo nudo parvo; elytris apice truncatis angulo suturali solum spinifero, dorso utrinque vittis duabus nigris nitidis a basi usque fere ad apicem continuatis, maculisque eburneis utrinque duabus medianis linearibus quarum interiori multo breviori, tota superficie ruguloso-punctata et sparsim granulata.

Femora 4 posteriora in ♀ breviter et æqualiter bispinosa, in ♂ spinis vix perspicuis; acetabula antica extus clausa; tubera antennifera obtusissima nec elevata.

Long. 11 lin. ♂ ♀.

Hab. Mexico, Tres Marias Islands (*Forrer*).

This species has quite lost the appearance of an *Eburia*, owing to the denuded black lines of its upper surface and the coarseness of its laid pubescence. The black lines of the elytra are in the situation of the rudimentary nervures seen in several other species, and the two separated linear median ivory spots are situated upon them. The callus on the site of the thoracic spine is scarcely elevated in the female and wanting in the male. I obtained a male specimen of this species without locality at the sale of the collection of the late Aspinall Turner.

EBURODACRYS (p. 22).

Eburodacrys callixantha (p. 23).

To the locality given, add:—Mexico, Cerro de Plumas (*Höge*).

One example from the above-named locality has considerably longer twin ivory spots in the middle of the elytra than in Chontales specimens, and the outer one is nearly one half longer than the inner. It tends to connect the species with *E. asperula*.

Eburodacrys asperula (p. 23).

In an example in the Sallé collection labelled "Mexico," the outer of the median twin lineoles advances in front a little beyond the inner; as in the type specimen it is more than twice the length of the inner. I see no other difference. In both *E. callixantha* and *E. asperula* the elytra are setiferous-punctate to the apex.

3 (A). **Eburodacrys lævicornis.**

E. callixanthæ affinis; differt antennarum articulis 3°–4ᵐ in ♂ vage, in ♀ vix perspicue canaliculatis, 5°–6ᵐ integris. Major, pallide flava, erecte setosa, thorace transversim strigoso, tuberculis duobus antico-discoidalibus nigris, spina laterali tuberibusque dorsalibus flavis; elytris crebre punctatis post maculas lævissimis, utrinque maculis sicut in *E. callixantha* oblongo-ovatis tribus, una basali postice nigro-marginata, duabus postmedianis contiguis nigro-cinctis quarum exteriori paullo posteriori; angulo suturali acuto producto, exteriori spiniformi flavo; antennarum scapo (♂ ♀) basi antice late dilatato et retuso; femorum spinis fusco-nigris.

Long. 8½–10 lin. ♂ ♀.

Hab. PANAMA, Bugaba (*Champion*).—SOUTH AMERICA, Venezuela (*Göring*).

The antennæ in the single female example obtained by Mr. Champion show scarcely any trace of sulci even on the third joint, and very few punctures. A female from Venezuela has the sulci a little more conspicuous, and a male from the same locality shows them distinctly on the third and fourth joints; but the furrows are not deep or carinated on the margins as in the deceptively similar *E. callixantha* and in all the allied species. In *E. callixantha* joints third to sixth are sulcated. The erect hairs of the elytra are very much less numerous than in *E. callixantha*; and they are much shorter than in *E.* 6-*maculata* (Fabr.) and allied species.

3 (B). **Eburodacrys coalescens.** (Tab. XVII. fig. 14.)

Angusta, testaceo-flava, longe erecte setosa, thorace relative valde elongato, versus medium paullulum dilatato, spina laterali brevissima, dorso sat recte transversim strigoso, tuberculis duobus discoidalibus nigris; elytris usque ad apicem confertim punctulatis, angulo suturali acuto producto, exteriori spiniformi flavo, utrinque maculis duabus eburneis, altera basali rotunda altera mediana lata; pedibus gracilibus, femoribus posticis quam corpus multo longioribus.

Long. 6 lin. ♂.

Hab. NICARAGUA (*Sallé*).

The union of the twin ivory spots in the middle of the elytra forms an irregular oval spot (narrowly margined, except externally, with brown), the division between the two being marked by a curved punctured line.

Eburodacrys mexicana (p. 23). (Tab. XVII. fig. 17.)

Var. *E. interrupta.* Thoracis rugulis medio plus minusve interruptis.

Hab. GUATEMALA, Mirandilla (*Champion*); PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

ROMALEUM (p. 23).

Romaleum atomarium (p. 24).

The Mexican example which I referred to this species, on further comparison with North-American specimens of *R. atomarium*, proves not to belong to it, and to be nearer *Hypermallus* than *Romaleum*. The differences between the two genera, however, are very slight. It is described below as *H. decipiens*. The true *R. atomarium* has not yet been received from Central America, and must therefore be erased from our list.

2. **Romaleum simplicicolle.**

Enaphalodes simplicicollis, Haldem. Proc. Ac. Phil. iii. p. 151.
Romaleum simplicicolle, Leconte, Smiths. Misc. Coll. ii., Long. p. 181.

Hab. North America.—Mexico, Northern Sonora (*Morrison*).

EUSTROMA (p. 24; to follow the genus *Romaleum*).

Eustroma, Leconte, Smiths. Misc. Coll. ii., Long. p. 186.

The following is the only species of this genus at present known.

1. **Eustroma validum.**

Elaphidion validum, Leconte, Proc. Ac. Phil. 1858, p. 82; Smiths. Misc. Coll. ii., Long. pp. 186, 187[1].

Hab. North America, Texas, Arizona, Lower California [1].—Mexico, Presidio (*Forrer*).

ELAPHIDION (p. 24).

Elaphidion irroratum (p. 24).

To the Mexican locality given, add:—Tres Marias Islands (*Forrer*).

Elaphidion coronatum (p. 24).

To the localities given, add:—Mexico, Cordova (*Sallé*); British Honduras (*Blancaneaux*).

HYPERMALLUS (p. 25).

1 (A). **Hypermallus decipiens.**

Romaleum atomarium, antè, p. 24 (nec Drury).

Romaleo atomario similis, sed multo angustior tuberibusque antenniferis haud acuminatis. Elongatus, subcylindricus, fuscus; elytris pube fusco-cinerea maculatim variegatis, apice sat late recte truncatis utrinque æqualiter et longe bispinosis; metasterni episternis elongatis antice quam postice paullulum latioribus; ♂, thorax sicut in *Romaleis* suborbicularis, creberrime intricato-punctulatus dorso callis angustis et parvis quinque sublævigatis; antennæ articulis 3°–5ᵐ apice unispinosis, 6°–10ᵐ breviter bispinosis; mesosternum antice subverticale.

Long. 11 lin. ♂.

Hab. Mexico, Paso del Macho (*Höge*).

One example.

1 (B). **Hypermallus senex.**

Nigro-fuscus, nitidus, capite supra elytrisque plagis magnis (e maculis congestis) utrinque duabus, prima a basi usque ultra medium secunda apicali, albo-cinereo tomentosis, thorace quadrato-ovato (♂) grosse confluenter punctato, callo dorsali elongato alteris duobus parvis antico-discoidalibus, lævibus, politis, maculis nonnullis fulvis; scutello fulvo; elytris apice recte truncatis utrinque breviter sed acute bispinosis, dorso confertim (apicem versus subtilius) punctato; antennis articulis 3°–6ᵐ apice unispinosis, 7°–10ᵐ brevissime bispinosis; mesosterno antice bituberculato et subverticali.

Long. 11 lin. ♂.

Hab. Mexico (*coll. Bates, ex coll. Turner*).

One example of this fine and conspicuous species from the collection of the late

Aspinall Turner, and doubtless from the same locality (Northern Mexico?) as the *Eburea ulkei* and other species of the same collection.

Hypermallus undulatus (p. 25). (Tab. XVII. fig. 20.)

To the locality given, add:—MEXICO, Ventanas (*Forrer*); NICARAGUA (*Sallé*).

Hypermallus mœstus (p. 26).

To the Mexican locality given, add:—Monclova in Coahuila (*Dr. Palmer*).

Hypermallus truncatus (p. 26).

Elaphidion truncatum, Haldem. Trans. Am. Phil. Soc. x. p. 33; Leconte, Smiths. Misc. Coll. ii., Long. p. 184[1].

Elaphidion debile, Leconte, Proc. Ac. Phil. vi. p. 442.

To the localities given, add:—NORTH AMERICA, Texas[1].—MEXICO[1], Tres Marias Islands (*Forrer*), Guajuco in Nuevo Leon (*Dr. Palmer*), Cordova (*Sallé*), Jalapa, Almolonga (*Höge*).

8. **Hypermallus inermis.**

Elaphidion inerme, Newman, Entomologist, 1841, p. 29; Leconte, Smiths. Misc. Coll. ii., Long. p. 183.

Hab. NORTH AMERICA.—GUATEMALA, Mirandilla, Panajachel, Volcan de Atitlan (*Champion*); NICARAGUA, Chontales (*Belt*, *Janson*); PANAMA, Bugaba (*Champion*).

I have compared the Central-American female examples with a specimen of the same sex from Texas. There are considerable differences in the reticulate-punctuation of the thorax and the width of the smooth longitudinal vitta, but the differences are not constant, and with the material before me it is impossible to do other than consider all as belonging to one and the same species. The male, as in *H. truncatus*, to which *H. inermis* is most nearly allied, has a quite different thoracic sculpture, close and fine, with rather larger punctures intermixed.

9. **Hypermallus grisescens.**

H. inermi proxime affinis, sed differt elytris pube cinerea sat dense vestitis, thoraceque nigro opaco, in ♀ rugulis tenuibus curvatis, spatioque abbreviato discoidali polito; elytris apice acute sat late truncatis.

Long. 7–9 lin. ♂ ♀.

Hab. MEXICO, Jalapa (*Höge*); GUATEMALA, Pantaleon, Torola (*Champion*).

Very closely allied to *H. inermis* and *H. truncatus*. It differs at first sight in the tomentum on the elytra being ashy, instead of tawny-brown, in colour, and in being condensed into patches, which cover nearly the whole elytra, browner specks being interspersed, and a longer brown spot being conspicuous on the sides, a little behind the middle. The thorax is more oval, and the central polished space in both sexes does not extend to the front edge, but forms a short line only near the middle.

The close punctuation of the thorax in the male is similar in all three species; but in the female *H. grisescens* differs from the others in the sculpture not consisting of large punctures, but of very fine, short, curved elevated lines, *i. e.* it forms a reticulation with the meshes almost everywhere broken, the depressed portions being black and opaque. The truncature of the elytra is sharper than in *H. inermis*, with both angles distinct, but unarmed.

10. **Hypermallus subseriatus.**

H. inermi affinis. Subcylindricus, supra fulvo- subtus griseo-tomentosus; thorace (♀) cylindrico-ovato sat crebre ocellato-punctato linea tenui dorsali integra lævi; elytris subseriatim punctatis, fere æqualiter fulvo-tomentosis, erecte pubescentibus, apice oblique truncatis angulo suturali obtusissimo; antennæ articulis 3^{o}–6^{m} apice intus spinosis, spina art. 3^{i} longiori.

Long. $6\frac{1}{2}$–8 lin. ♀.

Hab. PANAMA, San Lorenzo (*Champion*).

11. **Hypermallus eximius.** (Tab. XVII. fig. 19.)

Nigro-fuscus; elytris abdomineque castaneo-rufis, antennis pedibusque pallidius rufis, pilis discretis incumbentibus albis vestitus, thorace maculis octo, elytris fasciis maculariibus duabus (1^{a} mediana, 2^{a} ante apicem) niveo-tomentosis; thorace subcylindrico, dorso confertim alveolato, spatio parvo discoidali lævi; elytris versus apicem angustatis, apice breviter oblique subsinuato-truncatis, passim confertim punctulatis; corpore subtus vitta macularia vel interrupta cinereo-tomentosa a collo usque prope ventris apicem extensa.

Long. 6 lin. ♂?

Hab. MEXICO, Oaxaca (*Sallé*).

One example. The thorax is spotted almost the same as in the Australian *Strongylurus thoracicus* and *S. cretifer*.

12. **Hypermallus lanuginosus.** (Tab. XVIII. fig. 4.)

H. villoso (Fabr.) affinis; minus elongatus thoracisque lateribus fere parallelis etc. Linearis, testaceo-ferrugineus pube subfloccosa fulvo-ochracea dense vestitus, corpore subtus pedibusque obscure fuscis; fronte declivi, planata, oculis supra valde distantibus; thorace cylindrico, (♀?) sparsim grosse punctato, medio lævi; elytris apice late truncatis, angulo suturali recto, exteriori longe spinoso, sat crebre punctatis, pube vix maculatim vestitis, pilisque erectis densis brevibus; ♀? antennis articulis 3^{o} et 4^{o} solum perspicue spinosis, art. 4^{o} quam 3^{us} vel 5^{us} distincte breviori.

Long. 5 lin. ♀?

Hab. GUATEMALA, Cerro Zunil 4000 feet (*Champion*).

Three examples, apparently all females, the sculpture of the thorax consisting of large scattered punctures, with a dorsal longitudinal smooth space; the dense and rather curly incumbent pubescence conceals the punctuation to a great extent.

13. **Hypermallus longissimus.** (Tab. XVII. fig. 4.)

H. villoso (Fabr.) affinis, sed multo major, thorace elongato, anguste cylindrico. Valde elongatus, postice (præcipue ♂) gradatim angustatus, castaneo-fuscus, pube argenteo-cinerea vestitus (guttulis fuscis interrupta) setisque perpaucis erectis; antennis ♂ ♀ quam corpus multo brevioribus, articulis 3^{o}–6^{m} apice intus

breviter, 3° paullo longius, spinosis; thorace transversim irregulariter ruguloso; elytris punctulatis, juxta suturam (♂) depressis, apice utrinque sinuato-truncatis et longe bispinosis.

Long. 11–15 lin. ♂ ♀.

Hab. Mexico (*Sallé*), Jalapa (*Höge*).

The structural characters of this remarkable species are very similar to those of *H. villosus*; the antennæ have no trace of carinæ or grooves on the dorsal surface of their joints, and the hind tibiæ are simple. The laid ashy pile, which is much interrupted by spotted bare spaces, has a silvery lustre in certain lights.

14. **Hypermallus glabriusculus.**

H. scabricolli (Bates) affinissimus, sed differt elytris recte truncatis angulo suturali recto, nec profunde sinuatis utrinque bispinosis. Gracilis, castaneo-fuscus, toto corpore glaber (fronte, scutello, guttisque duabus thoracis et interdum elytrorum, ochraceo-tomentosis exceptis), setis cinereis suberectis passim vestitus; antennis pedibusque castaneo-rufis; thorace cylindrico prope angulos anticos subito angustato; elytris subcylindricis versus apicem angustatis, apice recte truncatis, angulo suturali subacuto exteriori longe spinoso, dorso crebre, versus apicem subtilius et sparsius, punctatis; pectore grosse punctato; antennis art. 3° longe, 4°–6^m^ brevissime, spinosis; thorace linea lata dorsali lævi; in ♂ utrinque creberrime punctulato, plaga antica dorsali grosse punctata; in ♀ grossissime (lateribus confluenter) punctata.

Long. 5–6½ lin. ♂ ♀.

Hab. Panama, Bugaba (*Champion*).

Besides the mode of truncature of the elytra, this species differs from the closely allied *H. scabricollis* (the type specimen of which is a female) in the thorax of the female not being alveolate-punctate, the whole body much more thinly pubescent, and the elytra having very much fewer specks of tomentum.

15. **Hypermallus ——?**

Hab. Mexico, Jalapa (*Höge*).

A single specimen of an obscure species with rounded apices to the elytra; ? = *H.* (*Elaphidion*) *spurcus*, Lec.

16. **Hypermallus ——?**

Hab. British Honduras (*Blancaneaux*).

A single specimen in bad condition, but evidently distinct from all the other Central-American species here recorded.

17. **Hypermallus misellus.**

Minus linearis, convexus, fuscus; elytris, antennis, pedibus ventroque rufescentibus; sat æqualiter griseo-fulvo pubescens elytrisque dense erecte pilosis; thorace sat angusto, cylindrico-ovato (♂), sparsim punctulato, plaga magna utrinque, basali et altera minori discoidali grosse punctatis vel foveolatis; scutello concolori; elytris prope apicem rotundato-angustatis, apice truncatis, angulo exteriori obtuso, suturali acuto, supra sat crebre punctato, versus basin grossius ibique punctis hic illic subseriatis.

Long. 5½ lin. ♂.

Hab. Guatemala, Mirandilla (*Champion*).

A single specimen of a small insignificant-looking species, distinguishable by the sculpture of the thorax, which is unlike that of any other species in the same sex.

CACOPHRISSUS (p. 26; to follow the genus *Hypermallus*).

Gen. *Stromatio* sat affinis. Corpus fere cylindricum, grosse incumbenti-pubescens et passim dense setosum. Caput antice verticale, tuberibus antenniferis rotundatis parum elevatis. Palpi breves, subæquales, articulo terminali sat anguste triangulari. Antennæ, ♂ corpore dimidio longiores, ♀ corpore parum breviores; usque ad apicem infra longe ciliatæ; scapo quam art. 3^us^ paullo breviori, art. 4° quam 3^us^ multo breviori, 4°–11^m^ elongatis, singulis quam 3^us^ longioribus, depressis, supra obtuse carinatis. Thorax cylindrico-ovatus, ♂ ♀ similariter grosse sparsim punctatus. Elytra apice obtuse rotundata. Prosternum inter coxas angustissimum. Acetabula antica extus perparum angulata; intermedia fere clausa. Femora gradatim incrassata, ♂ corporis apicem attingentia.

One of the numerous feebly-characterized forms, of which there are many still undescribed in collections, allied to *Hesperophanes* and *Stromatium*, and which cannot, in the present state of our knowledge, be referred to any of the published genera. In many respects, and particularly in the form of the head, *Cacophrissus* seems to be allied to *Anoplium*, Haldemann, but in that genus (incorporated by Leconte with *Elaphidion*) the thorax has the sexual difference of sculpture characteristic of the *Elaphidion* group. *Cacophrissus* has much in common also with *Perilasius*, but it differs in the short subequal palpi (*Perilasius* having much elongated maxillary palpi), in the grooved antennæ, &c. The antennæ are compressed and slightly dilated, not sideways, but above and beneath, and the middle of the broadened upper surface is faintly carinated or roof-shaped, this being more visible in the male than in the female, and on the third to the sixth joints.

1. **Cacophrissus pauper.** (Tab. VIII. fig. 8.)

Piceo- vel castaneo-fuscus, ochraceo-fulvo pubescens et setosus; thorace sat elongato, convexo, antice et postice æqualiter et modice angustato, grosse et sparsim punctato; elytris sparsim et minus grosse punctatis.

Long. 5½–8 lin. ♂ ♀.

Hab. MEXICO, Presidio (*Forrer*).

TRICHOPHORUS (p. 26).

Trichophorus decipiens (p. 26). (Tab. XVII. fig. 7.)

We now figure this species.

3. **Trichophorus jansoni.**

Fulvo-rufus, nitidus, erecte hirsutus, tomento cinereo-albo variegatus; thorace plagis elongatis tribus nitidis, interstitiis ♂ minute, ♀ alveolato-punctatis; elytris sparsius punctulatis, apice anguste sinuato-truncatis angulo suturali breviter, exteriori longe, spinosis; scutello, episternis ventrisque maculis lateralibus dense cinereo-tomentosis; antennis (♂ ♀) articulis 3°–7^m^ breviter spinosis; femoribus apice muticis; antennarum articulis 3°–6^m^ inconspicue unicarinatis.

Long. 8–9 lin. ♂ ♀.

Hab. NICARAGUA, Chontales (*Janson*).

Differs from the allied species in the more scattered and indefinite tomentose markings of the elytra; these consist of minute specks of irregular shape and more or less confluent, spread over the surface, but chiefly in an ill-defined streak on the sides, and another shorter and oblique on the disc towards the base.

PERIBŒUM (p. 27).

Stizocera, Serville, Ann. Soc. Ent. Fr. 1834, p. 107?

Stizocera, Serville, according to that author's definition, is very near *Peribœum*, Thomson, differing chiefly in the third to the fifth antennal joints only being spined; the oblong-ovate unarmed, smooth, but somewhat uneven and depressed thorax being a less important character, and the bidentate apex of the posterior femora existing in greater or less development in most species of *Peribœum*. None of the authors who have since dealt with the Sphærioninæ appears to have been acquainted with the type of Serville's genus *S. armata*, from Brazil. It seems, from the description, to be identical with my *Nephalius fragilis* (Trans. Ent. Soc. 1870, p. 274), though the size of the two insects is widely different, *N. fragilis* being $5\frac{1}{2}$ lin. and *S. armata* 10 lin. Being unacquainted with most of the described species of the group, I do not feel justified in substituting the name *Stizocera* for *Peribœum*, though it is highly probable the respective type species represent two distinct genera. The number of spined joints in the antennæ, in short, may be a generic character: Serville gives for *Stizocera* 3–5, overlooking, I think, a minute spine at the apex of the sixth, whilst in the type of *Peribœum* (*P. acuminatum*, Thoms.), joints 3–8 have long spines.

Peribœum villosulum (p. 27).

To the localities given, add:—Mexico, Cordova (*Sallé*); Panama (*Boucard*).

Peribœum bimaculatum (p. 27). (Tab. IV. fig. 15.)

The reference to this plate was accidentally omitted on page 27.

3. **Peribœum cribricolle.** (Tab. XVIII. fig. 9.)

Elongatum, angustum, rufo-castaneum, nitidum, erecte pilosum; capite et thorace sat grosse discrete punctatis, hoc elongato-cylindrico, spatio abbreviato dorsali lævi; elytris sat confertim punctulatis, apice recte truncatis, angulo suturali recto exteriori longe spinoso; antennis (♀) articulis 3°–4ᵐ subtiliter carinatis nec sulcatis, 3°–5ᵐ apice (3° longius) spinosis; femoribus clavatis et pedunculatis, posticis apice breviter bidentatis.

Long. $7\frac{1}{2}$ lin. ♀.

Hab. Mexico, Almolonga (*Höge*).

One example only. The species resembles *Psyrassa* in the long and recurved spine of the third antennal joint and cylindrical thorax; but it differs in having a spine on

the fifth, besides a minute one on the sixth joint; spines in *Psyrassa* existing only on the third and fourth joints. It would belong therefore to *Stizocera*.

4. **Peribœum reticolle.** (Tab. XVIII. fig. 6.)

Nigro-fuscum; elytris, antennis pedibusque obscure castaneis, capite supra thoraceque crebre alveolato-punctatis, hoc sat elongato, lateribus æqualiter rotundatis; scutello cinereo-hirto; elytris apice obtuse truncatis, supra erecte hirsutis sat crebre (versus basin aspere) punctulatis; pedibus hirsutis, femoribus posticis minus abrupte clavatis, tibiis extus unicarinatis; antennis (♀) articulo 3° carinato, scapo grosse punctato, art. 3°–5^{m} apice spinosis.

Long. 5 lin. ♀.

Hab. MEXICO, Ventanas, Tres Marias Islands (*Forrer*).

Allied to *P. bimaculatum*, and forming with that, and probably other species, a group or distinct genus, characterized by the alveolate sculpture of the thorax. In *P. bimaculatum*, however, we have an approach to the thoracic sculpture of the typical *Peribœa* in the smooth dorsal space or callus, besides the more abruptly clavate femora.

NEPHALIUS (p. 27).

This generic name is inapplicable for our Central-American species and must be withdrawn; they should be all referred, at least provisionally, to *Peribœum*. Lacordaire's suppression of Newman's genus *Nephalius*, and its reconstitution under the same name for the reception of a different series of species, is a proceeding which is not likely to meet with permanent approval; and it is better at once to restore the name for the group which embraces Newman's typical (or first) species, viz. *N. amictus*, which has since received a new name, viz. *Mephritus*, Pascoe. *Nephalius amictus*, Newman, is nearly allied to, if not identical with, Pascoe's type (*Mephritus cinerascens*). The true *Nephalii*, as far as at present known, are from South Brazil, at any rate none are contained in our collections from Central America.

Nephalius rutilus (p. 27).

To the locality given, add:—MEXICO, Playa Vicente (*Sallé*).

Nephalius rugicollis (p. 27).

To the localities given, add:—PANAMA, Taboga Island (*Champion*).

MALLOCERA (p. 28).

2. **Mallocera amazonica.**

Mallocera amazonica, Bates, Trans. Ent. Soc. 1870, p. 278[1].

Hab. GUATEMALA, Yzabal (*Sallé*).—SOUTH AMERICA, Amazons[1].

One male example, agreeing perfectly with the type specimen (also a male) from Ega on the Upper Amazons.

PSYRASSA (p. 28).

Psyrassa basicornis (p. 28).

To the locality given, add:—MEXICO, Almolonga (*Höge*).

Psyrassa castanea (p. 28). (Tab. XVII. fig. 8.)

We now add a figure of this species.

3. **Psyrassa sallæi.** (Tab. XVIII. fig. 11.)

Nigra, nitida, capite thoraceque rufis, elytris chalybeis.
Long. $4\frac{1}{2}$ lin.

Hab. MEXICO (*Sallé*).

One example, differing from *P. basicornis* only in colour, the antennal scape and femora being black, or bluish black, instead of red as in *P. basicornis*. In size the single specimen is much smaller, *P. basicornis* being quite 6 lines long. The genus is well distinguished by its long, cylindrical, nearly smooth thorax, and the great length of the spine on the third joint of the antennæ.

4. **Psyrassa tympanophora.** (Tab. XVIII. fig. 12.)

P. castaneæ similis, sed angustior præcipue thorace angustiori cylindrico, grosse sparsim punctato. Angusta, linearis, fulvo-castanea, nitida, breviter fulvo-setosa, antennis pedibusque melleo-flavis; capite ante oculos prolongato, angusto, palpis maxillaribus ♂ art. apicali dilatissimo apice in discum ovale expanso (♀ normali, anguste triangulari); fronte et vertice grosse confluenter punctatis, plaga ante epistomatem magna triangulari polita; elytris discrete sicut in *P. castanea* punctatis, apice sinuato-truncatis, angulo suturali breviter, exteriori elongato, spinoso. Antennæ articulis 3°–5^{m} teretibus angustis nec carinatis.
Long. 6 lin. ♂ ♀.

Hab. MEXICO, Almolonga (*Höge*).

Notwithstanding the extraordinary bell- or cymbal-shaped development of the apical joints of the male maxillary palpi, the narrow and rather prolonged muzzle, and the uncarinated antennal joints, this curious species bears so close a resemblance to *P. castanea* that it cannot well be removed from the genus *Psyrassa*.

IRONEUS (p. 29).

3. **Ironeus mutatus.** (Tab. XVIII. fig. 10.)

I. duplici (Bates) differt tantum coloribus, capite thoraceque rufis, femoribus nigris. Gracilior, elytris dense erecte pubescentibus setisque longioribus intermixtis; niger, capite thoraceque rufis sparsissime punctatis.
Long. $5\frac{1}{4}$ lin.

Hab. MEXICO, Almolonga (*Höge*).

One example.

EURYSTHEA (p. 29; to follow the genus *Ironeus*).

Eurysthea, Thomson, Class. des Ceramb. p. 247.
Euristhea, Lacordaire, Gen. Col. viii. p. 321.

An exclusively Tropical-American genus, of which about half a dozen species are known.

1. **Eurysthea cribripennis.** (Tab. XVIII. fig. 5.)

Angusta minus convexa, setis griseis incumbentibus et erectis vestita, castaneo-fusca, antennis pedibusque fulvescentibus, elytris utrinque fascia mediana transversa valde angulata (circumflexiformi) maculisque rotundatis duabus prope apicem (altera juxta suturam, altera, interdum minus distincta, marginali) testaceo-fulvis; thorace callis nitidis quinque (uno elongato dorsali alteris utrinque duobus interdum fere conjunctis), interstitiis sparse grosse punctatis, plus minusve fulvo-aureo tomentosis; elytris confertim sed discrete (apicem versus subtilius) punctatis, apice transversim truncatis, angulo exteriori longe spinoso. Antennæ ♂ ♀ articulis 3°–4ᵐ apice unispinosis, supra, ♂ valde, ♀ vix perspicue, carinatis. Thorace spina laterali, ♂ brevissima, ♀ elongata et acuta. Femoribus posticis gradatim incrassatis, nec tumide clavatis.
Long. 7–10 lin. ♂ ♀.

Hab. PANAMA, Volcan de Chiriqui (*Champion*).—SOUTH AMERICA, Colombia, Ecuador.

This would be a *Mallocera*, Sect. 2, according to Lacordaire's definition; but it is clearly more closely allied to *Eurysthea obliqua* than to the type of *Mallocera*. It differs from *Eurysthea* in the spined antennæ and the less clavate hind femora. Further material is required to test the generic validity of these characters. I suspect they are variable, having before me an allied species in which some examples have only the third joint spined, and others both the third and fourth.

SPHÆRIONILLUM.

Corpus minus elongatum, sparse longe setosum. Oculi minus grosse granulati. Palporum articuli terminales angustius triangulares. Antennæ sat breves; scapo quam articulus tertius haud breviori, articulis 3°–8ᵐ unicarinatis (nec sulcatis) apice unispinosis. Thorax sat late rotundatus, inermis, dorso æquali. Elytra picta, punctis grossis et sparsis setiferis exceptis lævia, apice truncata et spinosa. Femora clavata et pedunculata, apice brevissime bidentata; tibiæ intus et extus carinatæ. Acetabula antica et intermedia clausa. Mesosternum latum sat convexum.

A group of small species, differing greatly from the rest of the Sphærioninæ in general form and colours. In their style of elytral markings they resemble *Stenygra* and the allied genera; but their true affinity appears to be in the direction of *Sphærion*, with which they agree in all structural characters, except the rather more finely facetted eyes and less securiform palpi.

1. **Sphærionillum pictum.**

Nigro-piceum, nitidum, sparsim (apud elytra seriatim) griseo-setosum, thoracis corporisque subtus lateribus argenteo-tomentosis; antennis, tibiis et tarsis rufo-castaneis; elytris utrinque maculis magnis quadratis tribus fulvo-testaceis, 1ª juxta scutellum, 2ª et 3ª lateralibus ante et post medium, illa per marginem incrassatum usque ad humerum continuata; thorace lato, suborbiculari, sparsissime punctato; elytris apice flexuoso-truncatis, angulo exteriori breviter spinoso.
Long. 5½ lin. ♂ ♀.

Hab. MEXICO, Playa Vicente, Cordova (*Sallé*).

Named *Sphærion pictum*, Chev. (MS.), in the Sallé collection. In the male the antennæ are a little longer, in the female a little shorter, than the body.

2. **Sphærionillum quadrisignatum.** (Tab. XVII. fig. 21.)

Angustius, thorace elongato-ovato, basi longius angustato, toto (spatio angusto mediano excepto) argenteo-tomentoso; elytris utrinque maculis flavo-testaceis duabus, prima ante medium versus marginem valde angustata, secunda post medium angusta fasciæformi, apice recte vel sinuatim truncatis, angulo suturali breviter producto, exteriori longe spinoso. Cæteris sicut in *S. pictum*.

Long. 5–6 lin. ♂ ♀.

Hab. Mexico, Cordova (*Sallé*), Paso del Macho (*Höge*).

ECTENESSA.

Gen. *Peribœi* speciebus tenuioribus similis, sed adhuc gracilior antennisque muticis. Corpus sublineare, setosum. Tubera antennifera parum elevata. Palpi valde inæquales, articulo ultimo late triangulari. Antennæ graciles, ♂ corpore dimidio longiores, inermes, infra parum dense ciliatæ, articulo 4° elongato, præcedenti et sequenti parum breviori, 3°–6^{m} vel 3°–7^{m} subtiliter interdum vix perspicue carinatis. Thorax elongatus, cylindrico-ovatus, inermis vel subinermis, dorso depresso et calloso, callo utrinque prope basin paullo altiori. Elytra postice attenuata, apice spinosa. Pedes elongati, graciles; femora abrupte clavata et longe pedunculata; tibiæ posticæ carinatæ. Prosternum inter coxas angustissimum; coxæ subglobosæ paullo exsertæ; acetabula clausa.

A genus of mixed structural characters, which will not fall into any of Lacordaire's groups, and appears equally allied to his *Sphærionides*, *Ibidionides*, and *Calliopsides*. Besides the following Mexican species three are known to me from South Brazil, which differ from the type in their subopaque surface and less pronounced dorsal elevations (opaque like the rest of the surface) and in the feebly tuberculated sides of the thorax *.

* For the better understanding of the genus the three species may be here described:—

Ectenessa subopaca.

Fulvo-testacea, subopaca, passim sed sparsim longe setosa; antennis (♂) versus basin paullulum crassioribus, art. 3°–6^{m} valde carinatis; thorace alutaceo, subtiliter incumbenti-pubescenti, utrinque medio tuberculo minuto acuto, callis subbasalibus conspicuis, cæteris vix elevatis; elytris passim discrete punctatis, dorso æqualiter depressis, apice oblique sinuato-truncatis, angulo exteriori longe producto.

Long. 5½ lin.

Hab. Parana (Provincia), South Brazil.

Ectenessa phthisica.

Pallide flavo-testacea; capite thoraceque rufo-testaceis, opacis, haud perspicue sculpturatis, hoc tuberculo laterali minuto acuto; antennis et tibiis posticis subtilissime subobsolete carinatis; elytris apice latius transversim truncatis, angulo suturali acuto exteriori longius spinoso, dorso utrinque medio longitudinaliter oblique depresso, discrete punctulato subnitido.

Long. 5½ lin. An *E. subopacæ* ♀?

Hab. South Brazil.

Ectenessa sexmaculata.

Rufo-testacea, elytris utrinque maculis tribus magnis ovatis albo-testaceis, quarum 3^{a} apicali nigro-marginata; thorace elongato-ovato inermi, dorso grosse punctato opaco, basi et callis obliquis duobus a basi usque ad medium haud punctatis; elytris crebrius punctulatis, dorso antico lineis duabus elevatis, apice sinuato-truncatis utrinque bispinosis; antennis tibiisque subtilissime vix perspicue carinatis; femoribus posticis gradatim clavatis.

Long. 5½ lin. ♂?

Hab. Brazil. The elytra are marked similarly to many *Ibidia*.

Ibidion anormale, Thomson, Physis, i. 3, p. 145, is probably a fourth species of *Ectenessa*, and is similarly marked to *E. sexmaculata*.

1. **Ectenessa nitida.** (Tab. XVIII. fig. 3.)

Sublinearis, rufo-testacea, nitida; capite et thorace subsparsim ocellato-punctulatis, hoc medio parum dilatato inermi, juxta basin sat valde angustato, dorso depresso, spatio dorsali elongato lævi, calloque utrinque elongato subcurvato prope basin magis elevato; scutello argenteo-tomentoso; elytris apice utrinque longe unispinoso, angulo suturali nullo, dorso utrinque oblique depresso, discrete punctulato.

Long. $5\frac{1}{2}$ lin. ♂.

Hab. MEXICO, Cordova (*Sallé*); NICARAGUA (*Belt*).

PIEZOCERA (to follow the genus *Ectenessa*).

Piezocera, Serville, Ann. Soc. Ent. Fr. 1834, p. 92; Lacordaire, Gen. Col. viii. p. 326.

An exclusively Tropical-American genus, of which four or five species have been described.

1. **Piezocera monochroa.**

Linearis, castaneo-rufa, nitida, interdum leviter æneo-tincta, longe setosa; thorace cylindrico-angusto (basi sulcato-constricto et ante sulcum bituberoso) tuberculo parvo laterali, dorso sparsim setifero-punctato; elytris apice oblique truncatis angulo exteriori obtuse producto, dorso utrinque longitudinaliter depresso, subseriatim setifero-punctato, interstitiis punctis nudis minoribus. Antennæ articulis 3^{o}–10^{m} æqualibus valde dilatatis triangularibus.

Long. 3–4 lin.

Hab. MEXICO, Almolonga (*Höge*); GUATEMALA, San Gerónimo (*Champion*).

HEMILISSA (to follow the genus *Piezocera*).

Hemilissa, Pascoe, Trans. Ent. Soc. ser. 2, iv. p. 238; Lacordaire, Gen. Col. viii. p. 327.

Like *Piezocera* and *Haruspex*, from which latter it differs almost solely in the acuminated or spinose antenniferous tubercles, confined to Tropical America. Four species have been described.

1. **Hemilissa flavicauda.** (Tab. XVIII. fig. 7.)

Quoad formam *Haruspici brevipedi* simillima. Paullo minor et gracilior, castaneo-rufa; elytris apice late flavo-testaceis; sat dense breviter setosa; scapo, capite et thorace opacis asperatis, hoc cylindrico-ovato, basi angustato, dorso paullo inæquali, lateribus muticis; elytris apice oblique sinuato-truncatis, angulo exteriori paullulum producto, dorso sat confertim confuse (versus apicem obsolete) punctato, punctisque majoribus triplici serie; corpore subtus pedibusque sublævibus; tibiis posticis vix compressis carinato-sulcatis. Antennis gracilibus, articulo 3^{o} quam cæteri paullulum majori, 3^{o}–10^{m} carinatis, 6^{o}–9^{m} leviter serratis.

Long. 4–5 lin.

Hab. GUATEMALA, Cerro Zunil (*Champion*).

COSCINEDES (to follow the genus *Hemilissa*).

Subfam. *Piezocerinæ* pertinet, sed tibiis posticis haud carinatis corporeque toto crebre reticulato-punctato. Corpus angustum, nudum. Caput exsertum; frons transverso-quadrata lateraliter marginata; tubera antennifera lata parum elevata. Palpi brevissimi, articulo apicali anguste triangulari. Antennæ (♂) filiformes corpore parum longiores, nudæ; articulo 3^{o} quam cæteri singuli (et scapus) breviori, 4^{o} paullulum longiori sed quam cæteri autem breviori; 3^{o}–7^{m} sulcatis, sulco obtuse marginato, 5^{o}–10^{m} leviter

serratis. Thorax elongatus, cylindricus, basi constrictus; inermis. Elytra versus apicem angustata, apice obtuse truncata, dorso utrinque depressa, margine laterali medio valde sinuato. Prosternum inter coxas angustum, post coxas late dilatatum, planum; acetabula extus et postice arcte clausa (coxæ haud exsertæ); mesosternum latum, planum, acetabula clausa; segmenta ventralia normalia. Femora abrupte clavata; tibiæ posticæ vix compressæ, haud carinatæ; tarsi breves et lati.

The sculpture of the antennæ brings this dubious little genus within the limits of the Piezocerinæ; but in general form and in the proportions of the antennal joints it more nearly resembles the Graciliinæ. Marked peculiarities are the absence of hairs from both body and limbs, and the very close, elegant, reticulated sculpture, *i. e.* deep punctures with net-like interstices, of the whole body.

1. **Coscinedes gracilis.** (Tab. XIX. fig. 4, ♂.)

Fusco-ferrugineus subopacus; corpore supra et subtus crebre reticulato-punctato, punctis versus elytrorum apices et apud ventrem discretioribus; femoribus lævibus, tibiis et scapo subtiliter punctatis.

?♀. Antennis quam corpus multo brevioribus; elytrorum lateribus paullulum rotundatis, scapo et tibiis creberrime grosse punctatis.

Long. $4\frac{1}{4}$ lin.

Hab. ♀. Mexico (*Sallé, ex coll. Sturm*); ♂. Panama, Taboga Island (*Champion*).

One example of each sex.

MILTESTHUS (p. 29).

Miltesthus marginatus (p. 29).

To the localities given, add:—Costa Rica, Cache (*Rogers*); Panama, Peña Blanca, San Feliz (*Champion*).

HEXOPLON (p. 30).

Hexoplon albipenne (p. 30).

To the locality given, add:—Guatemala, El Reposo, San Gerónimo (*Champion*); Panama, Bugaba, David (*Champion*).

2. **Hexoplon calligramma.** (Tab. XVIII. fig. 13.)

H. albipenni affine et simile. Castaneo-rufum, nitidum; antennis (articulis 1^{o}–2^{m} rufis exceptis) pedibusque flavo-testaceis; elytris albis, fascia lata basali, litura tenui s-formi mediana transversa, fasciaque angusta angulata ante-apicali, rufo-castaneis; elytris versus basin et suturam subtilius lineato-punctulatis (lateribus et apice lævibus) apice utrinque bispinosis; meso- et metasternis abdomineque fuscis politis, lateribus argenteo-sericeis. Sicut in *H. albipenne* sparsim setosum antennisque infra sparsim ciliatis.

Long. $6\frac{1}{2}$ lin.

Hab. Mexico, Bobo (*Höge*).

One example only.

GNOMIDOLON (p. 30; to follow the genus *Hexoplon*).

Gnomidolon, Thomson, Syst. Ceramb. p. 219; Lacordaire, Gen. Col. viii. p. 330.

Lacordaire reunites Thomson's genus *Hexoplon* with *Gnomidolon*, and, having

examined a large number of species, I am inclined to agree with him; the greater length of the spine at the tip of the intermediate femora which distinguishes a few extreme forms, and is the sole character of *Hexoplon*, not being supported by other structural modifications. One of the chief features which distinguishes *Gnomidolon* and *Hexoplon* from *Ibidion* and *Octoplon* appears, however, to have been overlooked by Lacordaire, though duly mentioned by Thomson; it is the long and slender curved scape, almost always produced or dentate at its exterior apex. The form of the antenniferous tubercles, which Lacordaire brings into the first rank of characters, appears to have no systematic importance.

About a dozen species of the group *Hexoplon* are known, and more than a score of *Gnomidolon*, all peculiar to Tropical America, the great majority to the Guiana and Brazil subprovinces.

1. **Gnomidolon lætabile.** (Tab. XIX. fig. 1.)

Hexoplonti albipenni simile, sed multo minus, sparsim setosum, antennis infra sparsim ciliatis; castaneo-rufum politum, subtus nigricans, pectoris et ventris lateribus argenteo-sericeis; antennis (art. 1°–2ᵐ rufis exceptis), pedibus et elytris flavo-testaceis, his utrinque maculis tribus castaneo-nigris æquidistantibus, 1ª lineari subbasali, 2ª parva rotunda mediana, 3ª ante-apicali, rotundata, suturali; scapo elongato curvato extus apice perparum producto obtuso, articulis 3°–4ᵐ vel 3°–6ᵐ bicarinatis; thorace elongatissimo, lævi; elytris apice transversim truncatis, angulo exteriori solum spinoso, medio dorso depresso, prope suturam et basin lineato-punctato; femoribus quatuor posticis valde elongatis sed gradatim (præcipue intermediis) clavatis, apice brevissime bidentatis, posteriorum dente exteriori paullo longiori.

Var. Macula elytrorum subapicali deficiente, antennis basi tarsisque nigricantibus.

Long. $3\frac{2}{3}$–4 lin.

Hab. PANAMA, Bugaba (*Champion*).

Many examples, apparently of both sexes.

2. **Gnomidolon insulicola.** (Tab. XIX. fig. 2.)

Parvum, lineare, castaneo-rufum, politum; antennis (scapo basi obscuro excepto), pedibus (femoribus posticis medio fuscis exceptis) elytrisque testaceo-fulvis, his medio fascia angusta paullo obliqua (suturam haud attingenti) fusca maculaque vaga utrinque ante fasciam flavescenti; antennis infra sparsim ciliatis, scapo elongato-curvato, antice integro, apice haud producto, articulis 3°–4ᵐ (♀) gracilibus obsoletissime carinatis; thorace anguste cylindrico valde elongato, lævissimo; elytris apice transversim truncatis, angulo exteriori longe spinoso, dorso medio depresso pauciter setoso juxta suturam et basin sat grosse seriatim punctato; pedibus gracilibus, femoribus elongatis gradatim clavatis, apice bidentatis, posticorum dente exteriori spiniformi; pectoris ventrisque lateribus argenteo-sericeis.

Long. $2\frac{1}{4}$ lin.

Hab. PANAMA, Taboga Island (*Champion*).

One example.

OCTOPLON (p. 30).

Octoplon glabriolum (p. 30).

To the locality given, add :—MEXICO (*Höge*).

2. **Octoplon candidum.**

Hexoplonti albipenni simillimum, sed differt characteribus genericis, viz. scapo magis clavato antice retuso, femoribusque quatuor posticis clavatis, pedunculatis apice breviter bidentatis. Castaneo-rufum, nitidum, subtus nigricans pube subtilissime diffusa argenteo-grisea, antennis (articulis 1°–2^{m} rufis exceptis) pedibusque fulvo-testaceis ; elytris testaceo-albis, utrinque maculis tribus æquidistantibus nigris quarum 1^{a} cum macula majori basali triangulari castaneo-rufa confusa, maculaque marginata (juxta humerum) elongata, castaneo-rufa ; tuberibus antenniferis elevatis, acutis, articulis 3°–5^{m} teretribus nec carinatis ; thorace lævi, cylindrico relative minus elongato, basi sulcato subconstricto, medio dorso tuberculo elevato alterisque duabus parum elevatis ; scutello nigro ; elytris apice transversim sinuato-truncatis angulo suturali producto exteriori longe spinoso ; dorso punctis setiferis perpaucis exceptis lævissimo ; femoribus 4 posticis elongatis clavatis et graciliter pedunculatis, apice breviter bidentatis ; tibiis haud carinatis.

Long. 6 lin. ♂.

Hab. Panama, Volcan de Chiriqui (*Champion*).

IBIDION (p. 30).

1 (A). **Ibidion pleurostictum.** (Tab. XVIII. fig. 15.)

I. griseicolli affine. Castaneo-fuscum, thorace (disco excepto) corporeque subtus (prosterno antice glabro excepto) argenteo-sericeis ; elytris breviter sat dense setosis, fulvis, macula magna laterali triangulari, vitta communi anguste triangulari circumscutellari, vittula laterali subhumerali, apiceque nigris ; antennis infra parciter ciliatis, scapo crasso, clavato, antice foveato, articulis 3°–6^{m} obtuse carinatis ; tuberis antenniferis acuminatis ; thorace disco transversim rugoso ; elytris postice paullo rotundato-angustatis, apice anguste sinuato-truncatis, angulo suturali dentiformi exteriori spinoso, dorso versus suturam seriatim pauciter punctulato ; femoribus elongatis minus abrupte sed crasse clavatis, duobus posticis apice bidentatis ; tibiis carinatis.

Long. 4–8 lin. ♂ ♀.

Hab. Panama, Bugaba, Nancito, Tolé (*Champion*).

1 (B). **Ibidion leucozona.** (Tab. XVIII. fig. 16.)

Lineare (lateribus parallelis), nigrum politum ; capite, thorace (fasciis duabus politis exceptis) corporeque subtus griseo-sericeis, antennis pedibusque plus minusve fulvo-testaceis ; tuberibus antenniferis latis planis, sed supra breviter acuminatis ; antennis scapo elongato, recto. antice integro, articulis 3°–8^{m} depressis linearibus supra acute carinatis ; thorace antice et medio transversim convexo ibique glabro ; elytris planatis breviter setosis, apice truncatis utrinque bispinosis, dorso ruguloso sparse punctulato fascia mediana recta angusta elevata eburnea ; pedibus brevibus, femoribus sat gradatim sed crasse clavatis, posticis brevissime bidentatis, tibiis extus carinatis.

Long. 3–5½ millim. ♂ ♀.

Hab. Panama, Bugaba (*Champion*).

1 (c). **Ibidion validicorne.** (Tab. XVIII. fig. 17.)

Quoad thoracem *Gnomidolonti lævicolli* et *G. adelpho* similis. Angustius, nigro-fuscum, læviter æneo-tinctum, longius hirsutum ; elytris macula humerali, vitta antemediana antice valde curvata (versus marginem dilatata, suturamque haud attingenti) et vitta postmediana antice versus suturam ascendenti apud marginem valde dilatata, fulvis ; antennis castaneis (♂), valide filiformibus, infra sparsim ciliatis, articulis apice supra setosis ; scapo sat elongato et recto modice incrassato, antice foveola parva, articulis 3°–6^{m} haud carinatis, parum depressis ; capite et thorace griseo-tomentosis, hoc medio fascia transversa elevata nigra polita, medio unituberculata ; elytris juxta apicem rotundato-angustatis, apice sinuato-truncatis utrinque bispinosis, spina exteriori longiori ; dorso politissimo passim sparsim (subseriatim) punctatis et longe

pilosis; pedibus obscure castaneis, femoribus brevibus, clavatis et pedunculatis, apice inermibus, tibiis haud carinatis.

Long. 6 lin. ♂.

Hab. PANAMA, Volcan de Chiriqui (*Champion*).

One example only.

The antennæ are very long, about double the length of the body, and more equably filiform from the base to the apex than is usual in the genus, the joints 3–6 not being perceptibly thicker than 7–11, as in the genus *Heterachthes* and its allies.

1 (D). **Ibidion integripenne.** (Tab. XVIII. fig. 14.)

Elongato-lineare (capite thoraceque relative brevibus), piceo-nigrum vel castaneo-fuscum plus minusve æneo-tinctum; elytris utrinque maculis discoidalibus rotundatis duabus (altera paullo ante, altera paullo post, medium) flavo-testaceis; capite thoraceque plus minusve punctato-rugosis, hoc curto, cylindrico dorso 5-tuberculato; tuberibus antenniferis supra obtusis; antennis ♂ scapo gradatim incrassato, punctato-scabroso, antice integro, ♂ articulis 3°–8^{m} modice dilatato-compressis, linearibus nec carinatis, infra sparsim ciliatis; elytris apice conjunctim rotundatis, dorso sparsim asperato-setifero-punctatis; prosterno inter coxas angustissimo, coxis conico-exsertis; femoribus sat abrupte clavatis, apice inermibus, tibiis haud carinatis.

Variat:—1. Macula anteriori geminata. 2. Macula posteriori deficienti. 3. Maculis connexis et in vittam angustam usque fere ad apicem extensis.

Long. 3–9 lin. ♂ ♀.

Hab. MEXICO, Cordova (*Sallé*), Almolonga, Jalapa (*Höge*).

1 (E). **Ibidion latevittatum.** (Tab. XVIII. fig. 18.)

I. integripenni affine, differt solum elytris utrinque vitta lata ochracea a basi usque prope apicem extensa, antennis pedibusque fulvo-testaceis, capite et thorace fulvo-pubescentibus.

Long. 4–7 lin. ♂.

Hab. MEXICO, Chiapas (*Sallé*).

Belongs to the same group as *I. integripenne* [which includes *I. ditelum*, Bates, *I. phoracanthoïdes*, White, *I. signaticolle*, Thoms., and other species], and approaching in their narrow prosternum sunk beneath the much exserted fore coxæ, the genus *Eligmoderma*. *I. latevittatum* has a similar thorax (roughly sculptured with five dorsal tubercles) to *I. integripenne*; the elytra also are relatively greatly elongated and entire at the apex, but the pale markings are widely different, the whole disc being occupied by an elongated ochreous stripe of broad but not quite regular width, leaving only the sutural, lateral, and apical margins (which around the apical part are very narrow) of the brassy chestnut-brown ground-colour.

1 (F). **Ibidion bilineatum.** (Tab. XVIII. fig. 19.)

I. latevittato affine. Castaneo-rufum, subglabrum, subtiliter parce setosum, thorace antice gradatim angustato prope basin paullo constricto, disco haud tuberoso sparsim punctulato; elytris (♀) quam thorax multo latioribus, apice brevissime truncatis, utrinque seriebus punctulorum tribus vittaque angusta recta flava a media basi usque ad suturam prope apicem extensa; corpore subtus rufo, glabro; vitta angusta laterali

argenteo-sericea a thoracis apice usque ad coxas posticas continuata; femoribus sat abrupte clavatis, posticis apice breviter bidentatis; nec tibiis nec antennis carinatis; prosterno inter coxas exsertas angustissimo.

Long. 7 lin. ♀.

Hab. GUATEMALA, Cerro Zunil 4000 feet (*Champion*).

One example only.

Ibidion tenuatum. (Tab. XVII. fig. 25.)

Parum, angustum, lineare longe setosum, castaneo-rufum vel fuscum; elytris fasciolis duabus eburneis, prima paullo obliqua ante medium (nec suturam nec marginem attingenti), secunda post medium transversa (extus solum abbreviata), post fasciam obscurioribus; tuberibus antenniferis subacutis; antennis (♀?), scapo sat crasse clavato, rufo-testaceo, articulis 3°–4^{m} supra carinatis, linearibus subdepressis, 4° quam 5^{us} dimidio breviori; thorace cylindrico, angusto nec tuberculato sublævi; elytris apice obtusissime truncatis, crebre punctulatis; prosterno inter coxas sat elevato, sed angusto; femoribus valde clavatis, inermibus; tibiis posticis haud carinatis.

Long. $3\frac{3}{4}$ lin.

Hab. MEXICO (*Sallé*).

Labelled *I. tenellum*, Dej., in the Sallé collection, a name adopted for another described species by Burmeister. Very similar to *Ibidion chiriquinum*, but in antennal structure belonging to a different section, viz. that typified by *I. textile*, Thomson.

Ibidion textile (p. 32).

Ibidion mexicanum, ante, p. 32.

To the localities given, add:—MEXICO, Tepansacualco, Juquila, Cordova (*Sallé*), Jalapa (*Höge*); GUATEMALA, Zapote, Coatepeque, San Gerónimo, Mirandilla (*Champion*); COSTA RICA (*Van Patten*), Cache (*Rogers*); PANAMA (*Boucard*), Volcan de Chiriqui, Tolé, San Feliz, San Lorenzo (*Champion*).

The long series of specimens I have been able to examine show this species to be extremely variable, not only in colour (from ashy brown to light tawny red), in shape of the elytral spots, and in pubescence (sometimes nearly glabrous and at others clothed with very fine sericeous tomentum), but also in the form of the apex of the elytra, which Thomson emphasizes in his diagnosis, to distinguish the species from his *I. mexicanum*, as "obliquely truncated, with the outer angle acuminate." The apex varies:—1. Transversely sinuate-truncate; sutural angle prominent, acute; exterior angle elongate-spinose. 2. Obliquely sinuate-truncate; sutural angle obtuse, exterior dentiform. 3. Obliquely and obtusely truncate. These modifications of elytral truncature, pubescence, and colour all occur together at Chontales and Jalapa; but I do not find obtusely truncated specimens in the series from the State of Panama. In size the species varies from $7\frac{1}{2}$ to 16 millim. The fourth antennal joint is remarkably short, the third to the sixth broadened and flattened with a central carina. The prosternum and fore coxæ are nearly as in *Heterachthes* and the majority of species of *Ibidion*. The hind tibiæ have a rudimentary carina on their outer side at the base only.

The two following extreme modifications merit separate mention:—

Var. *I. alacre.* (Tab. XVII. fig. 23.) Minus, pallidius testaceo-rufum, elytris apice brevissime et sæpe obtusissime truncatis, maculis quatuor eburneis nigro-marginatis, anteriori rotundata, posteriori transversa, sæpe angusta et fasciæformi.
Long. 4–5½ lin.

Hab. Mexico, Ventanas (*Forrer*), Cuernavaca (*Sallé*), Almolonga (*Höge*), Tehuantepec (*Sumichrast*); Guatemala, El Tumbador (*Champion*).

Var. *I. sericans.* Majus, pallide cinereo-fulvum. Capite, thorace et corpore subtus lætissime argenteo-sericeis, elytris recte attenuatis apice longe spinosis.
Long. 8½ lin.

Hab. Panama, Volcan de Chiriqui (*Champion*).

Both the above forms are connected with the typical *I. textile* by insensible gradations, and cannot therefore be treated as distinct species.

7 (a). **Ibidion ventricosum.** (Tab. XVIII. fig. 22.)

I. textili affinissimum, differt tantum elytris post medium dilatatis. Obscure fuscum antennis pedibusque nigricantibus, vel pallide fulvum; antennis pedibusque pallide testaceis: subtiliter fulvo-tomentosum et erecte setosum, subtus aurato-sericeum.
Long. 5½–6 lin. ♂ ♀.

Hab. Panama, Bugaba (*Champion*).

Numerous examples of this form were taken by Mr. Champion, all distinguishable from *I. textile* by the elytra being gradually dilated from a little before the middle to near the apex, whence they are more rapidly narrowed again, the apex itself having on each side a rather long and sharp slightly incurved spine, and the sutural angle being acute. In the dark brown examples the elytral spots are indistinct, and the insect resembles certain specimens of *I. textile* of the same colour from Coatepeque; but in the light tawny-yellow examples the spots are conspicuous, the hinder one not transverse and smaller than the anterior one.

Ibidion obtusum (p. 33).

Heterachthes obtusus, Bates, Trans. Ent. Soc. 1874 (nec 1873), p. 221, ♀.

To the locality given, add:—Mexico (*Sallé, Baden*); Guatemala, Purula (*Champion*).

The male has joints 3–6 without carinæ, slightly thickened but linear, the sixth not much thicker than the seventh. The tawny spots of the elytra vary in extent, the middle one being sometimes separated into two on each elytron, with the outer one joined to the apical spot. The following is an extreme variety, in which all the spots are reduced in size:—

Var. *I. segregatum*. Angustius et sublineare; elytris utrinque maculis parvis quinque fulvo-testaceis. (Tab. XVII. fig. 22.)
Long. 6½ lin. ♀.

Hab. MEXICO (*Sallé*).

11. **Ibidion vanum.** (Tab. XVIII. fig. 20.)

Ibidion (*Compsibidion*) *vanum*, Thomson, Physis, i. 3, p. 151[1].

Hab. GUATEMALA, Pantaleon, El Tumbador (*Champion*).—SOUTH AMERICA, Venezuela, Cayenne [1].

Closely allied to *I. histrionicum*, Bates, and *I. basale*, White, and others, which form a group very closely allied to the *I. textile* series.

12. **Ibidion hippopsioides.** (Tab. XVIII. fig. 25.)

Lineare, elongatum, parce fulvo-pubescens et breviter dense setosum, castaneo-rufum; elytris utrinque vitta dorsali nigra lineisque sat elongatis eburneis duabus prima ante secunda post medium; tuberibus antenniferis acuminatis; thorace anguste cylindrico, linea dorsali lævi polita; elytris apice conjunctim rotundatis sublineatim punctatis utrinque indistincte bicostulatis; antennis sat longe et dense ciliatis, scapo minus elongato, curvato, crasso antice longitudinaliter foveato, articulis 3°–7ᵐ linearibus, depressis carinatis (4° quam sequens paullulum breviori); prosterno inter coxas haud depresso sat angusto, femoribus subito clavatis, tibiis posticis haud carinatis.
Long. 6 lin. ♂.

Hab. GUATEMALA, San Gerónimo (*Champion*).

The pale lines of the elytra lie just within the outer edge of the black vitta.

13. **Ibidion ignobile.** (Tab. XVIII. fig. 24.)

I. submaculato (Chevr.) affine. Minus elongatum, lineare, depressum, fuscum, pubescens, sparsim breviter setosum; tuberibus antenniferis conicis; antennis quam corpus duplo longioribus ciliatis, scapo parum elongato, curvato sat crasso, articulis 3°–6ᵐ linearibus, depressis, carinatis, 4° quam sequens paullo breviori; thorace cylindrico, linea dorsali lævi polita; elytris relative brevibus apice singulatim subacuminatis, dorso depresso sat confertim punctulato, immaculato; prosterno haud depresso; femoribus subito clavatis, tibiis posticis haud carinatis.
Long. 5¼ lin. ♂.

Hab. GUATEMALA, Cerro Zunil 4000 feet (*Champion*).

Same group as *I. hippopsioides* and *I. submaculatum*, Chevr.(=? 4-*maculatum*, Fabr.). One example only.

14. **Ibidion semirufum.**

Angustissimum, nitidum, subtiliter setosum, nigrum; capite, thorace, pectore elytrisque tertio basali sanguineis, his utrinque lineola obliqua ante, fasciaque subrecta post medium, eburneis; antennis tenuibus (rufis art. 3°–6ᵐ nigro-fuscis), articulis 3°–4ᵐ paullulum robustioribus carinatis et subsulcatis, 4° quam 5ᵘˢ triente breviori; thorace cylindrico, elongato, nitido, lævi; elytris apice conjunctim rotundatis, confuse punctatis; prosterno et coxis sicut in *Ibidionis* typicis; femoribus abrupte clavatis, tibiis posticis extus versus basin carinatis.
Long. 4½ lin.

Hab. MEXICO, Almolonga (*Höge*).

15. **Ibidion tenuissimum.** (Tab. XVII. fig. 24.)

Parvum, cylindricum, angustissimum, nigrum; thorace postice, pectore elytrisque basi, læte fulvis, his utrinque lineola obliqua elevata ante medium fasciaque angusta subrecta post medium, eburneis, fascia fulva basali per suturam usque ad elytrorum dimidium excurrente; oculis vix convexis; tuberibus antenniferis conjunctis parum elevatis; antennis fulvis apicem versus interdum infuscatis, scapo brevi modice clavato, ♂ articulis 3°–6^{m} perparum incrassatis cylindricis nec complanatis, 3° subtiliter carinato, 4° quam 5^{us} triente breviori; thorace cylindrico postice gradatim angustato alutaceo-opaco et punctato; elytris apice conjunctim rotundatis confuse (basi grossius et sparsius) punctatis; prosterno et coxis normalibus, femoribus subito clavatis; tibiis posticis extus haud carinatis.

Long. $2\frac{3}{4}$–$3\frac{3}{4}$ lin. ♂ ♀.

Hab. Mexico, Guanajuato (*Dugès, coll. Sallé*), Cerro de Plumas (*Höge*).

In form, colours, and markings much resembling *I. semirufum*, but differing *inter alia* by its opaque thorax.

16. **Ibidion chiriquinum.**

Cylindricum, piceo-fuscum, passim setosum; elytris castaneo-rufis utrinque maculis duabus testaceis late fusco-marginatis, prima latiori ante medium suturam attingenti, secunda angustiori paullulum obliquo longe post medium, antennis pedibusque obscure rufo-castaneis; tuberibus antenniferis subacutis; antennis supra setosis infra ciliatis, ♂ sicut in *Heterachthi ebeno* articulis 3°–6^{m} elongatis crassis nec carinatis, 7°–11^{m} tenuioribus; thorace anguste cylindrico, incumbenti-pubescenti, dorso inæquali medio tuberculo angusto parvo; elytris crebre confuse punctatis, apice breviter obtuse truncatis; prosterno inter coxas sat elevato, coxis parum exsertis; femoribus brevibus clavatis, inermibus, tibiis posticis haud carinatis.

Long. 4 lin.

Hab. Panama, Volcan de Chiriqui (*Champion*).

This species presents most of the structural characters of the genus *Heterachthes*, Newman, but the form and style of markings are those of the species of *Ibidion* generally.

17. **Ibidion erythrocephalum.**

Ibidion erythrocephalum, White, Cat. Long. Col. B. M. ii. p. 224.

Hab. Guatemala (*Deby*).

The legs were deficient in the example described by White.

18. **Ibidion asperulum.** (Tab. XVIII. fig. 21.)

Sublineare, nigro-fuscum, griseo-pubescens et setosum, immaculatum; tuberibus antenniferis obtusis; thorace valde elongato, basi angustato, crebre minute punctulato; elytris relative brevibus, apice obtusissime truncatis, depressis creberrime punctulatis tuberculis parvis nonnullis asperatis; pedibus brevibus, femoribus gradatim sed valde clavatis, tibiis posticis haud carinatis; antennis ♂ quam corpus fere duplo longioribus, robuste filiformibus, scapo brevi incrassato antice impresso, articulis 3°–6^{m} quam cæteri paullulum crassioribus subtiliter carinatis, 4° quam 5^{us} paullo breviori; omnibus subtus sat longe et dense ciliatis.

Long. 4–$6\frac{1}{2}$ lin. ♂ ♀.

Hab. Mexico, Ventanas (*Forrer*).

HETERACHTHES (p. 33).

2. **Heterachthes æneolus.** (Tab. XVIII. fig. 23.)

Angustus, linearis, nigro-æneus, nitidus, sparsim setosus; capite post oculos recte angustato; thorace cylindrico fere lævi; elytris postice attenuatis apice singulatim paullo prolongatis, sed apice ipso obtuso, sparsissime lineato-punctulatis; femoribus modice clavatis; prosterno inter coxas haud depresso; antennis articulis 3°–6ᵐ dilatatis (sublinearibus) nec carinatis, 7°–11ᵐ tenuibus.

Long. 3½ lin. ♂.

Hab. Mexico, Cerro de Plumas (*Höge*).

Agreeing in structural characters, especially in the form of the antennal joints, with *Heterachthes ebenus*. The curious form of the head and the polished brassy surface give it a peculiar facies; but the species must be placed in *Heterachthes* if this genus is to be retained as distinct from *Ibidion*.

PHORMESIUM (p. 33; to follow the genus *Heterachthes*).

Phormesium, Thomson, Syst. Ceramb. p. 217; Lacordaire, Gen. des Col. viii. p. 335.
Ibidion, White, Cat. Long. Col. Brit. Mus. p. 222.

Five or six species are known, all Tropical American.

1. **Phormesium virgulatum.**

Ibidion virgulatum, ante, p. 31.

To the locality given, add:—Panama, Bugaba (*Champion*).

The original description above cited was drawn up from a single female example and compared with the same sex of *Ibidion melanodacrys*, White (not *I. quadriguttatum*, as inadvertently stated). Male examples since taken by Mr. Champion prove the species to belong to the genus *Phormesium*, which seems to form a natural group distinguished from *Ibidion* by the antennæ of the male being short (scarcely longer than the body) and having a thickened fusiform third joint.

LAMPROMERUS (to follow the genus *Heterachthes*).

Lampromerus, Thomson, Class. Long. p. 202; Lacordaire, Gen. des Col. viii. p. 350.

A single species found in several of the West-Indian Islands constitutes this genus.

1. **Lampromerus pilicornis.**

Callidium pilicorne, Fabr. Ent. Syst. i. 2, p. 327 [1].

Hab. Mexico (*Sallé*).—West Indies [1].

A single female example in the Sallé collection.

Supposed to be the *Curtomerus luteus*, Steph. Man. British Coleopt., described from a specimen introduced into Britain by commerce.

CURIUS (to follow the genus *Lampromerus*).

Curius, Newman, Entom. 1841, p. 17; Lacordaire, Gen. des Coleopt. viii. p. 352.

Four species, reduced to two by Crotch, of this singular genus have been described. They are confined to the Southern States of N. America and Cuba. The following seems in some degree intermediate between *Curius* and *Pentomacrus*, White.

1. **Curius panamensis.** (Tab. XIX. fig. 3.)

Oblongo-linearis, depressus, breviter incumbenti-pilosus, opacus, fusco-testaceus; antennis, articulis apice exceptis, femorum pedunculis, tibiis et tarsis elytrorumque lituris, pallido-testaceis; antennis (♂) quam corpus duplo longioribus, tenuibus, pubescentibus et infra sparsim ciliatis, scapo gradatim clavato, articulis 3° et 4° apice extus acute productis, 5° quam cæteri multo longiori (quam 4^{us} duplo longiori); thorace valde elongato, cylindrico subdepresso, punctulato, opaco; elytris apice conjunctim acute rotundatis passim creberrime punctulatis, fascia angusta antemediana, macula triangulari suturali versus apicem, apice et vitta irregulari marginali pallide testaceis; pedibus valde elongatis, femoribus longe pedunculatis, clavis subtus acute dentatis.

Long. $4\frac{1}{2}$ lin.

Hab. PANAMA, Tolé (*Champion*).

One example.

OBRIUM (p. 33).

Obrium, Serville, Ann. Soc. Ent. Fr. 1834, p. 93; Lacordaire, Gen. Col. viii. p. 361.
Phyton (partim), Newman, Ent. 1841, p. 19; Leconte, Smiths. Misc. Coll. Long. part ii. p. 306.

2. **Obrium pallidum.**

Callidium pallidum, Say, Journ. Acad. Phil. iii. p. 412[1].
Phyton limum, Newm. Entom. 1841, p. 18[2].

Hab. NORTH AMERICA, Southern States[1 2].—MEXICO, Presidio (*Forrer*).

3. **Obrium lituratum.** (Tab. XIX. fig. 6.)

O. pallido proxime affine et simile; differt elytris multo longioribus. Pallide testaceum, setosum, nitidum; capite fasciis duabus (frontis et verticis), thorace vittis tribus, elytris utrinque lineis quatuor (prima et secunda parallelis subapproximatis obliquis retrorsum versus suturam, tertia elongata fere suturæ parallela, quartaque parum obliqua prope apicem) nigro-fuscis, plaga discoidali pallidius fusca; pectore nigro; femorum clava fusco-annulata basi fusca; tibiis basi excepta nigro-fuscis; antennis articulis apice fuscis.

Long. $2\frac{3}{4}$–$3\frac{1}{3}$ lin. ♂ ♀.

Hab. GUATEMALA, Cerro Zunil 4000 to 5000 feet (*Champion*).

Var. Caput immaculatum, elytris linea fusca tertia (suturæ subparallela) deficiente.

The thorax is decidedly narrower than in *O. pallidum* and *O. cordicolle*, the dilatation behind the anterior constriction not being abrupt as in those species, and the middle of the sides being angulated.

4. **Obrium angulosum.** (Tab. XIX. fig. 7.)

O. liturato affine et simile; differt litura elytrorum apicali utrinque angulata (sicut circumflexum), angulo versus basin spectante et maculas fuscas postico-discoidales attingente. Pallide testaceum, nitidum, setosum; thorace (mox a sulco apicali late rotundato-dilatato), vittis duabus, elytris utrinque lituris quinque, fuscis (lituris 1ª et 2ª sicut in *O. liturato* parallelis obliquis retrorsum versus suturam, 3ª et 4ª post medium discoidalibus breviter vittiformibus, interiori suturæ subparallela, 5ª angulata ab apice sat remota); antennis articulis apice fuscis.

Long. $3\frac{1}{4}$ lin.

Hab. Panama, Tolé (*Champion*).

Very closely allied to *O. lituratum*, but differing in the form of the thorax, which is more broadly cordate than in *O. cordicolle*; in markings it agrees with *O. lituratum* in the two slender subbasal fasciæ of the elytra being nearly parallel and oblique rearwards from the base to the suture; the posterior discoidal patch is, however, much shorter and divided into two short subparallel vittæ, and the subapical fascia, instead of being near the apex and straight or slightly oblique, is further removed from the apex and on each elytron angulated in the middle, with the angle directed towards the base and touching the discoidal streak.

5. **Obrium cordicolle.** (Tab. XIX. fig. 9.)

Obrium cordicolle, Bates, Trans. Ent. Soc. 1870, p. 308 [1].

Hab. Panama, Bugaba (*Champion*).—South America, Amazons [1].

Also closely allied to *O. pallidum* and *O. lituratum*. The thorax is dilated and rounded from the anterior sulcus, but much less so than in *O. angulosum*. In markings it differs from the allied species in the form and position of the posterior fuscous markings of the elytra, which here consist of two slender fasciæ curved in such manner that the two together form on the elytra a common large transverse-oval ring. The original description was drawn up from a single specimen, evidently immature or defective in colouring, the antennæ and thorax being spotless or nearly so, and the basal markings of the elytra indistinct; the antennal joints in well-developed individuals, of which Mr. Champion took a good series, are tipped with fuscous, the thorax has two fuscous vittæ, and the base of the elytra a broad fascia, from the hinder edge of which proceeds on each elytron an oblique streak extending to the suture, of the same chestnut-brown colour. The hind femora and tibiæ are also more or less streaked with fuscous.

6. **Obrium piperitum.** (Tab. XIX. fig. 12.)

O. pallido affine; gracile, pallide testaceum, nitidum; elytris punctis setiferis seriatis fuscis, fasciisque angustis utrinque quatuor, 1ª subbasali intus versus scutellum curvata, 2ª paullo posteriori abbreviata recta, 3ª post medium vix arcuata apud suturam postice continuata, 4ª valde retrorsum (versus suturam) obliqua prope apicem; antennis articulis apice, femoribus 4 posticis (plus minusve) tibiisque apice, fuscis; thorace angusto, subelongato, mox pone sulcum anteriorem subito, sed modice rotundato-dilatato deinde ad basin gradatim angustato, dorso inæquali setifero-punctato.

Long. $2\frac{1}{4}$–$3\frac{1}{2}$ lin.

Hab. PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

Four examples.

7. **Obrium clerulum.** (Tab. XIX. fig. 5.)

O. cordicolli affine. Flavo-testaceum, nitidum, vertice thoracisque disco fuscis; elytris fasciis quatuor nigro-fuscis, 1ª lata subbasali (postice oblique versus suturam dilatata), 2ª lineiformi ante medium obliqua, 3ª lata post medium (ad suturam fere divisa) et 4ª mox pone hanc angusta postice curvata et antice ad suturam dilatata; thorace sicut in *O. cordicolli* antice modice rotundato-dilatato, antennis pedibusque nigro-fuscis, testaceo-variegatis.

Long. 2–3 lin.

Hab. PANAMA, Bugaba (*Champion*).

Four examples. Distinguished from all others of the group by its sharply defined and blackish markings.

8. **Obrium arciferum.** (Tab. XIX. fig. 11.)

Majus, elongatum, thorace angustiori medio dilatato dorsoque trituberoso; pallide testaceum, politum; vertice, thoracis macula transversa discoidali, elytrisque linea utrinque tenuissima arcuata a regione humerali (versus suturam curvata) usque longe ultra medium extensa, lineaque valde obliqua recta prope apicem, castaneo-fuscis; antennis pedibusque vix pallido-fusco variegatis; elytris confuse sparsim punctulatis.

Long. $4\frac{1}{4}$ lin.

Hab. GUATEMALA, Cerro Zunil (*Champion*).

One example.

9. **Obrium cruciferum.** (Tab. XIX. fig. 10.)

Magis elongatum, capite thoraceque relative angustioribus, fulvo-testaceum, nitidum; elytris medio late flavo-testaceis, litura magna communi fulvo-fusca X-formi, antennis pedibusque immaculatis; thorace sulco anteriori lato a margine anteriori sat distante, lateribus medio conice tuberculatis; elytris punctulato-setiferis seriatim dispositis.

Long. $3\frac{1}{2}$ lin. ♀.

Hab. MEXICO, Santecomapam (*Sallé*).

One example. This species bridges over the slight difference between *Obrium* and *Phyton*, as defined by Leconte.

10. **Obrium ruficolle.**

Castaneo-rufum; elytris obscure fuscis basi nigris, femorum clavis, ventro antennarumque basi nigris; thorace prope apicem et basin constricto, paullo ante medium dilatato et lateribus tuberculatis, dorso lato, lævi subinæquali medio tuberculato obtuso; elytris sparsim confuse et minute setifero-punctatis.

Long. 4 lin. ♀.

Hab. MEXICO, Ventanas (*Forrer*).

This would belong to *Phyton* according to Leconte's definition, the thorax being more narrowed behind than in front, and rotundate-dilated almost immediately after the anterior sulcus.

11. **Obrium cribripenne.** (Tab. XIX. fig. 8.)

Parvum, melleo-flavum, nitidum; elytris nigro-violaceis, pedibus (femoribus basi flavis exceptis), antennis ventroque nigro-piceis; thorace mox pone sulcum anteriorem modice rotundato-dilatato, postice gradatim angustato, dorso brevissimo, elytris grosse (hic illic subseriatim) discrete punctatis.

Long. $2\frac{1}{4}$ lin.

Hab. GUATEMALA, San Gerónimo (*Champion*).

Var. ? Minus (vix 2 lin.). Elytris fulvescenti-violaceis, femoribus flavis; antennis robustioribus.

Hab. MEXICO, Teapa (*Sallé*).

There is a single example only of each of the two forms, which may possibly prove, when further material is obtained, to belong to distinct species.

DISTENIA (p. 34).

Distenia pilatei (p. 34).

To the locality given, add:—PANAMA, Volcan de Chiriqui (*Champion*).

Distenia fimbriata (p. 34). (Tab. XIX. fig. 13.)

To the locality given, add:—MEXICO (*ex coll. A. Turner*).

Specimens from the collection of the late Mr. Aspinall Turner came, I have no doubt, judging from other species in the same collection, from Northern Mexico.

2 (A). **Distenia högei.** (Tab. XIX. figg. 6, 7, ♂ var.)

D. undata, Lec., affinis. Nigra, sparse cinereo-pubescens, subtus polita; elytris opacis rufo-castaneis, vitta utrinque lata marginali nigra ab humero usque ad apicem (postice gradatim latiori) nigra, fasciis undatis duabus (altera mediana altera prope apicem) cinereo-tomentosis; antennis pedibusque fulvo-rufis, femoribus dimidio apicali nigro; thorace grosse punctato dorso 5-calloso; elytris apice brevissime sinuato-truncatis, angulo suturali solum spinoso, dorso antico grosse et confertim seriato-punctato.

Long. 9 lin. ♀?

Hab. MEXICO, Cerro de Plumas (*Höge*).

♂ (var.?). Elytris nigris, utrinque maculis 3 fulvis, prima parva humerali, secunda majori marginali apud medium, tertiaque apicali suturam attingente, pedibus toto fulvis; cæteris sicut in ♀ antennis, subtus (hic illic) longe incumbenti-pilosis.

Hab. Cerro de Plumas (*Höge*).

Distenia geniculata (p. 35).

To the locality given, add:—GUATEMALA, Panzos (*Champion*); PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

3 (A). **Distenia fulvopicta.** (Tab. XVII. fig. 11.)

Angusta, piceo-nigra, nitida, erecte setosa; elytris utrinque fasciis tribus fulvis, 1ª et 2ª approximatis, ante medium a striis fuscis in lineolas quatuor divisis, 3ª integra obliqua prope apicem; thorace antice et postice sulcato-constricto, dorso elevato et trituberoso irregulariter punctato, tuberculo laterali valido apice recurvato-spinoso; elytris apice truncatis angulo suturali acute, exteriori longe spinoso, dimidio basali grosse punctato-striato, stria suturali usque ad apicem, stria 4ª usque longe ultra medium continuatis;

antennis (scapo nigro excepto) fulvis, articulis apice infuscatis ; pedibus fulvis, femoribus dimidio apicali, tibiisque basi nigris, tarsis fusco-maculatis.

Long. 7 lin.

Hab. GUATEMALA, Cubilguitz (*Champion*).

One example.

3 (B). **Distenia agriloides.**

D. fulvopictæ proxime affinis ; angustissima, elytris sublinearibus medio paullulum sinuato-angustatis deinde iterum paullulum gradatim dilatatis, prope apicem citius angustatis, apice sat late truncatis, angulo suturali acute, exteriori longe spinoso, sicut in *D. fulvopicta* grosse punctato-striatis ; chalybeo-nigra, nitida, erecte setosa ; elytris utrinque lituris curvatis tribus argenteo-griseo-tomentosis, 1ª prope basin, 2ª ad medium tertiaque longe ante apicem ; antennis (articulis 1º–2ᵐ et 10º–11ᵐ nigris exceptis) fulvis ; femoribus basi, tibiis medio et tarsis flavo-testaceis ; thorace antice valde, postice minus, sulcato-constricto, dorso elevato 5-tuberculato, tuberculo laterali valido apice recurvato-spinoso.

Long. 6–7 lin.

Hab. GUATEMALA, Panima, Sinanja (*Champion*).

Distenia fastuosa (p. 35).

To the localities given, add :—PANAMA, Bugaba (*Champion*).

This species, as Pascoe states, has a smooth under surface and femora without spines, characters which, *inter alia*, distinguish it from the following, with which it is liable to be confounded. The scape is thick, compressed at the base, and densely rugose-punctate.

5 (A). **Distenia cribristernis.** (Tab. XIX. fig. 20.)

D. fastuosæ similis ; paullo minor, gracilior supra glabra ; olivaceo-ænea, nitida, erecte setosa sed haud pubescens ; antennis fulvis, scapo paullo obscuriori, vel purpureo-fusco, gracili, sparsim punctato, basi tenui ; thorace angustiori, dorso calloso interstitiis grosse punctatis, tuberculo laterali acutius spinoso ; elytris apice utrinque bispinosis, spina suturali breviori, dorso (apice lævi excepto) crebre et grosse striato-punctatis ; metasterno grosse et discrete, abdomine paullo minus grosse, punctatis ; pedibus fulvis, femoribus posterioribus minus incrassatis plus minusve purpureo-fuscis, apice bispinosis.

Long. 7–9 lin. ♂ ♀.

Hab. PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

Var. *D. chontalensis* differt femoribus concoloribus apice brevissime bidentatis elytrisque angulo suturali vix producto.

Hab. NICARAGUA, Chontales (*Belt*).

Previously confounded with *D. fastuosa*.

5 (B). **Distenia rugiscapis.** (Tab. XIX. fig. 15.)

D. fastuosæ affinis, angustior, nigra, nitida ; elytris obscure viridi-cyaneis subtiliter pubescentibus, setosis, antennis (scapo nigro excepto) pedibusque fulvis ; capite mox pone oculos recte angustato, oculis extantibus ; partibus oris nigris ; thorace impunctato dorso 5-tuberoso, tuberculo laterali lato, conico, acuto ; elytris apice breviter sinuato-truncatis, angulo exteriori longe spinoso suturali dentato, dimidio basali

minus confertim grosse striato-punctato; scapo incrassato basi compresso, toto aspere et grosse rugoso; femoribus inermibus; corpore subtus lævi.

Long. 7 lin. ♂ ?

Hab. PANAMA, Bugaba (*Champion*).

One example.

5 (c). **Distenia spinosa.** (Tab. XIX. fig. 18.)

D. rugiscapi similis, sed differt inter alia femoribus 4 posticis longe bispinosis. Subchalybeo-nigra, partibus oris, epistomate, antennis totis pedibusque fulvis; capite post oculos elongato, rotundato-angustato; oculis magnis sed minus exstantibus; thorace impunctato, dorso 5-tuberoso impunctato, spina laterali longissima et acutissima; elytris subtilissime pubescentibus, parce setosis, apice late et recte truncatis, angulo exteriori longissime spinoso, suturali breviter dentato, dimidio basali striis 5 grosse punctatis quarum 2ª valde abbreviata; scapo versus apicem crasse clavato, basi angusto sed compresso, punctato-rugoso; femoribus 4 posticis bispinosis; corpore subtus lævi.

Long. 8 lin. ♂.

Hab. PANAMA, Bugaba (*Champion*).

One example.

5 (d). **Distenia sallæi.** (Tab. XVII. fig. 13.)

D. splendenti (Bates) proxime affinis, differt præcipue elytris sicut in *D. rufipede* et *D. phœocera* confuse punctulatis 4-striatis. Major, nigro-ænea; elytris viridi-æneis, densius brevissime setosis; antennis versus apicem piceo-rufis, pedibus castaneo-rufis; capite post oculos (vix exstantes) rotundato-angustato; thorace haud elongato, transverso, parce punctato quinque-tuberoso, tuberculo laterali magno conico acuto; elytris apice breviter sinuato-truncatis, angulo exteriori spinoso, suturali acuto, undique minutissime punctulatis et utrinque striis punctulatis distantibus quatuor, interstitiis (versus apicem exceptis) confuse punctulatis; metasterno sparsim punctato; scapo versus apicem crasse clavato, basi compresso et antice lineatim impresso, toto rude punctato; femoribus inermibus.

Long. 11 lin. ♂ ?

Hab. MEXICO (*Sallé*).

One example.

5 (e). **Distenia limbata.** (Tab. XIX. fig. 14.)

D. viridicyaneæ (Thoms.) affinissima, differt solum coloribus. Castaneo-rufa, corpore subtus vittaque elytrorum lata submarginali cyaneis metallicis; capite post oculos tumido; thorace minus elongato, sparsim punctato, 5-tuberoso, tuberculo laterali conico; elytris apice rotundatis, angulo suturali paullulum producto, utrinque striis punctatis tenuibus quatuor, interstitiis usque ad apicem confuse punctulatis; femoribus 4 posticis extus apice longe spinosis; scapo gradatim modice clavato punctato; corpore subtus polito; metasterno sat grosse abdomineque subtilius sparsim punctatis.

Long. 9½ lin. ♂.

Hab. MEXICO (*Sallé*).

One example. Belongs to Thomson's genus *Thelxiope*, which he distinguished from *Distenia* by the four posterior femora being unispinose.

5 (f). **Distenia fuscula.** (Tab. XIX. fig. 19.)

Fusca vel castanea, setosa; elytris subtiliter griseo-pubescentibus, femoribus basi tibiis et tarsis pallide testaceis; capite post oculos (modice prominentes) recte elongato; thorace antice et postice æqualiter angustato,

sulcato-constricto, dorso 5-calloso, interstitiis parum punctatis, spina laterali elongata, acuta, retrorsum curvata; elytris apice singulatim acuminatis, apice excepto confertim et grosse lineatim punctatis, versus scutellum punctis confusis; femoribus sat grosse incrassatis; metasterno et ventre confertim punctulatis; scapo elongato creberrime punctulato, basi attenuato.

Long. 4–6 lin. ♂.

Hab. MEXICO, Almolonga, Cerro de Plumas (*Höge*).

5 (G). **Distenia simplex.**

Minus elongata, purpurascenti-nigra, sat dense setosa, subnitida; pedibus melleo-flavis, palpis partibusque oris obscure fulvis; capite mox pone oculos (valde prominentes) constricto; thorace sat angusto, dorso haud tuberculato, elevato sed subplanato, parce punctato, tuberculo laterali obtuso; elytris apice rotundatis, sat crebre et grosse (versus suturam confuse, versus latera subseriatim) punctatis, prope apicem parum-punctatis; metasterni et ventris lateribus sparsissime grossissime punctatis; scapo brevi, gradatim clavato punctato; femoribus gradatim clavatis, inermibus.

Long. 7–8 lin. ♂ ♀.

Hab. PANAMA, Volcan de Chiriqui (*Champion*).

Of similar form and appearance to *D. nigrella*, which, however, has black legs, spined lateral thoracic tubercle, and differently sculptured elytra. Mr. Champion captured this and many other species of the genus by beating the withered leaves of fallen or felled trees in fresh clearings in the forests; the *Distenicæ*, as well as many other Longicornia, are fond of hiding in the curled-up leaves in the daytime, and probably sally forth only at night.

5 (H). **Distenia punctiventris.**

D. simplici affinissima, sed paullo minor et gracilior, antennis, palpis et pedibus fulvis elytrisque castaneis apice fuscescentibus. Capite mox pone oculos prominentes constricto; thorace sat angusto, dorso vix calloso, medio punctis nonnullis grossis, tuberculo laterali conico obtuso; elytris apice rotundatis sat crebre et grosse (versus suturam confuse, versus latera subseriatim) punctatis, prope apicem punctis paucioribus; metasterno et ventris segmentis 1–3 grossissime sed discrete punctatis; scapo gradatim modice clavato basi tenui, sparsim punctulato; femoribus paullo grossius clavatis.

Long. $5\frac{1}{2}$ lin. ♂.

Hab. PANAMA, Volcan de Chiriqui (*Champion*).

Two examples.

5 (I). **Distenia brevicornis.** (Tab. XVII. fig. 18.)

D. punctiventri simillima, differt tantum ventre fere lævi, metasternoque multo sparsius punctato. Antennis fulvis, ♀ quam corpus brevioribus; pedibus fulvis, elytris castaneo-rufis, capite, thorace corporeque subtus nigris nitidis; scapo breviori paullo grossius sed discrete punctulato.

Long. $5\frac{1}{2}$ lin. ♀.

Hab. MEXICO (*Sallé*).

One female example, with the antennæ considerably shorter than the elytra. Of *D. punctiventris* only the male is known; but the female of the very closely allied *D. simplex* has antennæ quite as long as the body.

5 (J). **Distenia pictipes.** (Tab. XIX. fig. 21.)

D. punctiventri et *D. simplici* proxime affinis, differt coloribus; nigra nitida, elytris utrinque vitta lata (a basi usque ultra medium) rufo-castanea, antennis, palpis et pedibus melleo-flavis, femoribus apice tibiisque basi nigris; capite post oculos prominentes constricto; thorace vage tuberoso, grosse foveolato-punctato, tuberculo laterali obtuso; elytris apice rotundatis sicut in *D. simplici* punctatis; metasterno parce punctato, ventreque fere lævi.

Long. 6 lin. ♂.

Hab. GUATEMALA, Sinanja valley (*Champion*).

One example.

5 (K). **Distenia langurioides.** (Tab. XIX. fig. 22.)

Valde elongata, angusta postice attenuata, nigra; capite thoraceque rufis, pectore et ventro piceis; palpis maxillaribus articulo terminali fusiformi acuminato, apice brevissime oblique truncato; capite post oculos (vix prominentes) recte prolongato; thorace brevi antice et postice æqualiter angustato et sulcato-constricto, tuberculo laterali conico, dorso obtuse 5-calloso fere lævi; elytris dense griseo-pubescentibus, lineis indistinctis nigris, apice rotundatis, utrinque striis 5 grosse punctatis quarum 2ª brevissima 1ª et 3ª solum versus apicem extensis; pectore et ventre subtiliter confertim punctulatis; antennis ♂ quam corpus multo longioribus; scapo elongato, grosse incrassato, basi tenui apice paullo angustato aspere punctulato.

Long. $5\frac{1}{2}$ lin. ♂.

Hab. MEXICO, Almolonga (*Höge*).

One example.

Distenia lineatopora (p. 35). (Tab. XVII. fig. 12.)

We now figure this and the following species, described in the earlier part of this work:—

Distenia vittata (p. 36). (Tab. XVII. fig. 10.)

COMETES (p. 37).

2. **Cometes eximius.**

C. pulcherrimæ simillimus, sed differt elytris apice sinuato-truncatis angulis suturali et exteriori plus minusve productis et acutis. Angustus, gracilis, læte viridi-cyaneus, nitidus; elytris sutura et margine violaceis, fasciis duabus sicut in *C. pulcherrimo* aurantiacis, usque ad apicem confertim grosse punctatis; scapo breviori grossius punctato; capite post oculos minus elongato nec tumido, recte angustato; thorace callo elongato dorsali elevato lævi, cæteris callis plus minusve obsoletis, grosse subconfluenter punctato.

♂ ♀. Palpi maxillares articulo terminali obtuse ovato, subgloboso, nitido, apicis concavitate punctiformi.

Long. $4\frac{1}{2}$ lin.

Hab. PANAMA (*Boucard*), David, Caldera in Chiriqui (*Champion*).

The hind femora are, in some examples, distinctly spined at their exterior apex. Mr. Champion informs me that he found this and other allied species sitting upon leaves in sunny openings in the forests or second-growth woods of the "tierra caliente;" examples were occasionally captured on the wing.

3. **Cometes hilaris.** (Tab. XIX. fig. 25.)

C. acutipenni (Buquet) simillimus; differt capite angusto post oculos haud subito angustato, ventre sparsim subtilissime setifero-punctulato. Angustus, gracilis, viridi-cyaneus; elytris vix nitidis versus suturam violaceis, fascia basali aurantiaca; capite post oculos quadrato apud collum angustato; thorace grosse subconfluenter punctato, callis quinque dorsalibus lævibus; elytris postice attenuatis apice sat prolongatis subacutis, undique confertissime grosse punctatis, costula utrinque tenuissima; corpore subtus subtilissime sparsim setifero-punctulato.

♂(?). Ventris segmento apicali plano, medio foveato, apice angustato et rotundato.

Long. $4\frac{1}{2}$ lin.

Hab. PANAMA, Bugaba (*Champion*).

Very similar in form and colours to the *C. acutipennis*, Buq., of Cayenne, but differing in the form of the head and the punctuation of the abdomen. In *C. acutipennis* (♂) the head is narrowed immediately behind the eyes, which latter are prominent, and the abdomen is very closely and coarsely punctured. If the two examples of *C. hilaris* are, as I believe, males, they offer further a great difference from the same sex of *C. acutipennis* in the terminal ventral segment, which in *C. acutipennis* is greatly elongated, semitubular, and broadly truncated at the apex*.

4. **Cometes festivus.** (Tab. XIX. fig. 24.)

C. pulcherrimo affinis; differt elytris utrinque maculis magnis cuneiformibus duabus aurantiacis, altera basali altera apicali. Viridi-æneus, capite angusto, post oculos tumido; thorace grosse subconfluenter punctato, callis quinque lævibus; elytris apice subacute rotundatis undique confertissime grosse punctatis, subtiliter costatis, maculis basali postice, apicali antice, versus discum prolongatis, subacutis.

♂. Palpi maxillares articulo apicali valde et oblique dilatato, campanuliformi, apicis concavitate latissima; ventris segmento apicali parvo, plano, apice subemarginato.

♀. Palpi maxillares articulo apicali ovato, apice acuminato.

Long. 4–$6\frac{1}{4}$ lin.

Hab. PANAMA, Bugaba (*Champion*).

5. **Cometes venustus.** (Tab. XIX. fig. 23.)

Elongatus, subviridi-cyaneus; elytris fulvo-aurantiacis, plaga utrinque elongata laterali (apud medium) violacea; capite post oculos gradatim paullo angustato; thorace grosse punctato-ruguloso, 5-calloso; scutello cyaneo; elytris apice oblique obtuse truncatis, confertim grosse (versus basin subseriatim) punctatis, unicostulatis; femoribus postice apice bispinosis; ventre grosse sed valde sparsim punctato.

♀. Palpi maxillares articulo apicali ovato.

Long. 6 lin.

Hab. PANAMA, Bugaba (*Champion*).

* I profit by this occasion to correct an error in the remarks on *C. acutipennis* and on the genus *Heteropalpus*, which I published in Trans. Ent. Soc. 1870, p. 441. I there say that the ♂ of *C. acutipennis* has the singular form of maxillary palpi which characterizes the genus *Heteropalpus*, the ♀ having normal palpi, and that this genus is therefore untenable. The pair of *C. acutipennis* received from Paris, labelled as such, on which the above remark was founded, I now find to be both males, and, notwithstanding the identity of colours, to belong, the one (the true *C. acutipennis*, Buq.) to *Cometes*, the other to *Heteropalpus*.

RHAGIUM (to be placed at the head of the Subfam. Callichrominæ, p. 37).

Rhagium, Fabricius, Gen. Ins. p. 51; Serville, Ann. Soc. Ent. Fr. 1835, p. 205; Ganglbauer, Bestimmungs-Tabellen d. Eur. Col., Verhandl. d. zool.-bot. Ver. 1881, p. 717.
Stenocorus (Geoffr.), Lac. Gen. Col. viii. p. 428.

A genus, with the exception of one species from the Cape of Good Hope, confined to the temperate zone of both hemispheres, and reaching high northern latitudes. Seven species have been described.

1. **Rhagium lineatum.**

Stenocorus lineatus, Oliv. Ent. lxix. p. 13, t. 3. f. 22[1].

Hab. North America[1].—Mexico, Morelia (*Sallé*), Las Vigas (*Höge*).

Scarcely distinct from the European *R. indagator*, Fabr., and, like that species, probably found in pine-woods.

PACHYTA (to precede the genus *Gaurotes*, p. 37).

Pachyta, Serville, Ann. Soc. Ent. Fr. 1835, p. 213.

A well-known north-temperate genus, ranging, like *Rhagium*, into high latitudes. About thirty-five species have been described. The following presents all the structural characters of the genus, with the exception of a slight difference in the form of the thorax, but it is isolated from all other known species by its style of coloration.

1. **Pachyta costaricensis.** (Tab. XX. fig. 1.)

Oblonga, subelongata, postice (♂) modice angustata, opaca, nigra; abdomine testaceo-rufo, elytris miniaceo-rufis, macula magna quadrata circumscutellari apiceque late, nigris; antennis articulis 3° et 4° brevibus; capite et thorace sat grosse subconfluenter punctatis, hoc tuberibus elongatis duobus dorsalibus, sulco transverso basali sat profundo, tubere laterali conico; elytris sparsim indistincte punctulatis brevissime setosis, apice rotundatis.
Long. $7\frac{1}{2}$ lin. ♂.

Hab. Costa Rica, Volcan de Irazu 6000 to 7000 feet (*Rogers*).

One example only, in a poor state of preservation; doubtless the living insect is much brighter in colour.

GAUROTES (p. 37).

Gaurotes donacioides (p. 37).

To the Mexican locality given, add:—Oaxaca (*Sallé*), Cordova (*Höge*).

3. **Gaurotes maculosus.**

G. donacioïdi proxime affinis. Fusco-æneus, elytris rufescenti-fulvis pilis adpressis cinereis maculatim vestitis,

et erecte fusco-setosis, apice sinuato-truncatis, angulo suturali producto acuto, exteriori brevius dentato; antennis pedibusque fulvis, tarsis tibiarumque apice fuscis, abdomine medio rufescenti; capite et thorace minus confertim sat valde punctatis griseo-pubescentibus; mesosterno convexo antice verticali.

Long. 5 lin. ♀.

Hab. MEXICO (*Sallé*).

One example only.

ACMÆOPS (to follow the genus *Gaurotes*, p. 38).

Acmæops, Leconte in Agass. Lake Superior, p. 235 (1850); Lacord. Gen. Col. viii. p. 441.

Like *Pachyta*, a characteristic north-temperate genus, but more numerously represented in North America than in the Old World. About thirty-five species are known.

1. **Acmæops longicornis.**

Leptura longicornis, Kirby, Fauna Bor.-Amer. p. 185 [1]; Lec. Journ. Ac. Phil. ser. 2. i. p. 321 [2].

Hab. NORTH AMERICA [1], Pacific States, Colorado [2].—MEXICO (*Sallé*).

One female example in the Sallé collection, labelled "*Leptura axillaris*, Sturm," MS.

LEPTURA (p. 38).

Leptura aliena (p. 38).

This species was described from female examples only. The sexes differ very considerably.

♂. Quoad formam *L. rufipedi* ♂ (Schall.) haud dissimilis, elytris supra paullulum deplanatis; antennis quam corpus multo longioribus.

♀. Elytra plus minusve elongato-oblonga, depressa, apice obtuso-rotundata; antennis quam corporis dimidium parum longioribus.

To the locality given, add:—MEXICO, Orizaba 11,500 feet (*Sallé*), Las Vigas (*Höge*); GUATEMALA, Quiche Mountains 7000 to 9000 feet (*Champion*).

The species is of abnormal appearance therefore only in the female, and even in that sex the elytra are sometimes no longer relatively than in many other species of the genus. A more important character, and one which distinguishes this and the following species (*L. anomala*) from all other *Lepturæ*, is the short and broad vertical forehead. The colour varies from dull black to castaneous, and the abdomen is sometimes testaceous red (var. *erythrogaster*, Sturm, MS.): the latter peculiarity exists in examples which do not differ in other respects, and is in no wise specific. The sculpture of the head and thorax consists of round punctures, which are sometimes smaller and sometimes larger, in the latter case being close together and subalveolated, leaving a smooth dorsal line.

Found under bark of pines. Named *L. corticina*, Chevr., and *L. nigrita*, Sturm (MS.), in the Sallé collection.

2. **Leptura anomala.** (Tab. XX. fig. 2.)

Elongato-oblonga, depressa, nigra vel castaneo-fusca, parum nitida, breviter dense griseo-setosa; thoracis dorso utrinque rufo; capite quam thorax latiori, post oculos latissimo, fronte brevi et verticali, confertim (occipite sparsius) punctato; thorace relative parvo, medio rotundato-dilatato, dorso polito, inæquali, sparsim punctato; elytris anguste oblongis, apice rotundatis, discrete punctulatis.

Antennæ ♂ corporis apicem, ♀ elytrorum dimidium attingentes.

Long. 6–9 lin. ♂ ♀.

Hab. Guatemala, Quiche Mountains 7000 to 9000 feet, Totonicapam 8500 to 10,500 feet (*Champion*), Volcan de Acatenango 10,000 to 12,000 feet (*Sarg*).

Under bark of pines at high elevations. The figure is from a male example from the Volcan de Acatenango.

NEOLEPTURA (p. 38).

Neoleptura lecontei (p. 38).

An example of this species in the Sallé collection is labelled as from Oaxaca.

OPHISTOMIS (p. 38).

Ophistomis rufiventris (p. 39).

To the localities given, add:—Panama, Volcan de Chiriqui (*Champion*).

Ophistomis lævicollis (p. 39).

To the locality given, add:—Mexico, Cuernavaca, Peras (*Sallé*), Oaxaca (*Höge*); Guatemala, San Gerónimo, Quiche Mountains 7000 to 9000 feet (*Champion*); Panama, Volcan de Chiriqui (*Champion*).

The specimen described appears to be a rare colour variety. Other varieties are as follows:—

1. Niger, abdomine (apice excepto) rufo. Mexico.
2. Niger, thorace postice plus minusve rufescente. Mexico.
3. Niger, thorace supra rufo. Guatemala.
4. Niger, thorace supra abdomineque (apice excepto) rufis. Guatemala.
5. Niger, thorace supra, metathorace, episterno abdomineque (apice excepto) rufis. Mexico.
6. Niger, thorace corporeque subtus (pro- et mesosternis medio nigris exceptis) rufis. Chiriqui.

The mesosternum in this species, and in *O. rostrata* from Colombia, is very convex; this character, joined to the form of the thorax and the angular shoulder of the elytra, is perhaps sufficient to warrant the generic separation of the two species from *Ophistomis*.

9. **Ophistomis pubipennis.**

O. rufiventri affinissimus, forsan ejus varietas. Differt solum thorace supra postice, ventre et pectoris lateribus obscurius rufis vel rufo-castaneis; elytris fulvo-aureo-incumbenti-pubescentibus.

Long. $4\frac{3}{4}$ lin.

Hab. Mexico (*Sallé*); Guatemala, Chacoj in the Polochic valley (*Champion*).

Two examples; both these have the apical ventral segments simply concave near the apex, without trace of raised margins. The Guatemala specimen has, however, the more slender form of the male sex; and, if it be really a male, the species must be specifically distinct from *O. rufiventris*, in which the same segment has a long triangular excavation with raised margins. So abrupt a structural modification would be very remarkable, the excavated last ventral segment with raised margins having been considered a generic character; such abrupt changes are common in the Longicornia, and the closely allied *O. rubricollis* from the Amazons has the segment entire.

10. **Ophistomis lachrymans.** (Tab. XX. fig. 4.)

Niger, nitidus; elytris basi latis ab ante medium valde angustatis, linea (medio interrupta) utrinque versus basin fulvo-testacea; capite ante oculos minus elongato, lato; thorace confertim subrugulose punctulato, linea dorsali lævi; elytris undique discrete punctulatis apice obliquissime truncatis; pectore utrinque segmentis 1°–4^{m} basi minutissime punctulatis fulvo-pubescentibus.

♂. Segmento ventrali terminali elongato, marginibus maxime elevato-laminatis, lobiformibus.

Long. 10 lin. ♂.

Hab. GUATEMALA, Purula (*Champion*).

The elytra are very broad at the base, broader relatively than in any other known species; the narrowing thence to the middle is consequently more rapid than in the allied forms.

Found on the wing in the virgin forest at an elevation of about 5000 feet.

11. **Ophistomis melampus.**

Gracilior, niger, nitidus; antennarum articulis apicalibus fulvis; capite ante oculos valde elongato et angusto sparsim punctato, vertice confertissime punctulato; thorace ante medium paullo dilatato, dorso confertim ruguloso-punctulato; elytris basi latis et ante medium valde angustatis, apice oblique truncatis, medio basi utrinque et juxta suturam depressis, discrete punctulatis; pectore ventrisque segmentis basi subtiliter dense punctulatis et griseo-pubescentibus.

♂. Segmento ultimo ventrali elongato, marginibus maxime elevato-laminatis, lobiformibus.

Long. 8 lin. ♂.

Hab. GUATEMALA, San Gerónimo (*Champion*).

12. **Ophistomis brachialis.**

O. melampo similis et affinis, differt femoribus anticis fulvis antennisque toto nigris. Gracilis, niger subnitidus, femoribus anticis fulvis; capite ante oculos valde elongato et angusto; thorace medio paullulum dilatato, dorso sparsim subtiliter punctulato nitido; elytris basi minus dilatatis, postice valde angustatis, apice sinuato-truncatis, angulo exteriori longe producto, grosse et sparsius punctulatis; metasterno ventrisque segmentis basi subtiliter punctulatis et argenteo-pubescentibus.

♂. Segmento ultimo ventrali medio longitudinaliter concavo marginibus minus alte elevatis.

Long. 7 lin. ♂.

Hab. MEXICO, Oaxaca (*Sallé*).

13. **Ophistomis sallæi.**

Aurantiaco-fulvus, supra brevissime et densissime pilosus; occipite, thoracis vittis duabus, scutello, maculis utrinque duabus ante medium elytrorum suturaque, fusco-nigris; antennis nigris, articulis 8°–10^{m} flavo-

testaceis; capite ante oculos valde elongato, occipite thoraceque confertim punctulatis, hoc graciliter campanuliformi; elytris sat valde elongatis, basi modice latis deinde usque ad medium citius, a medio usque ad apicem parum, angustatis, apice obliquissime truncatis, supra confertim punctulatis.

Long. $7\frac{1}{2}$ lin. ♀.

Hab. MEXICO (*Sallé*). One example.

More nearly allied to *O. melampus* and *O. brachialis* than to *O. picticornis* and *O. bivittatus*, which it most resembles in colour; the thorax, however, is much less widened posteriorly than in the same sex of the two last-named species. The antennæ are moderately thickened towards the apex.

14. **Ophistomis histrio.** (Tab. XX. fig. 3.)

Aurantiaco-fulvus, supra brevissime et densissime pilosus sed nitidus, elytris læte variegatis; capite ante oculos valde elongato et angusto, occipite confertim punctulato, fusco; thorace minus elongato, postice dilatato, medio perparum rotundato, confertim punctulato, margine antico fasciaque mediana valde flexuosa, versus discum postice oblique deflecta, apud lineam dorsalem interrupta, nigris; elytris sat valde elongatis, basi latis deinde usque ad apicem angustatis (nec postice anguste parallelogrammicis), apice obliquissime truncatis angulo exteriori longe producto; supra valde inæqualibus sparse punctulatis, utrinque maculis tribus pallidis nigro-marginatis, viz.:—1ª juxta scutellum quadrata, 2ª ante medium V-formi, 3ªque mox post medium triangulari, lituraque nigra paullo ante apicem; antennis nigris, articulis 7°–11ᵐ flavis; corpore subtus polito, segmentis sterni et ventris nigro-marginatis.

Long. $7\frac{1}{2}$ lin. ♀.

Hab. GUATEMALA, Cerro Zunil 5000 feet (*Champion*). Two examples.

Beaten from the flowers of an arborescent composite tree on the margins of the forest in the coffee plantations of the "Las Nubes" estate.

15. **Ophistomis saltator.** (Tab. XX. fig. 6.)

Minor, gracilis, flavo-testaceus, nitidus (abdomine rufescente); capite supra (macula flava ante antennarum basin excepta), antennis, vittis duabus thoracis latis, scutello maculisque quatuor marginalibus elytrorum, nigris; pectoris linea laterali, ventrisque segmentorum marginibus, nigris; pedibus nigris, femoribus (apice excepto) flavis; capite ante oculos sat elongato, discrete, thorace sparsissime, punctatis, hoc elongato-triangulari angulis posticis longe spinosis; elytris abbreviatis, a medio usque ad apicem angustis, apice utrinque sinuato-truncatis spinosis, supra sparsissime punctulatis, apud suturam depressis.

Antennæ ♂ apicem fere elytrorum attingentes modice incrassatæ, ♀ breviores ab articulo 5° incrassatæ.

♂. Segmentum ultimum ventrale elongatum basi integrum, deinde profunde concavum lateribus compressis (nec lobiformiter elevatis), apice in spinam productis.

♀. Color magis fulvus, pedibus testaceo-fulvis, tibiis apice tarsisque nigris.

Long. 6–$7\frac{1}{2}$ lin. ♂ ♀.

Hab. PANAMA, San Feliz, Chorcha, San Lorenzo, Tolé (*Champion*).

The four marginal black spots of the elytra are, in the male, placed thus:—one below the shoulder, small, and sometimes wanting; one near the middle, triangular, not reaching the suture; one behind the middle, reaching the suture; and one occupying the apex and often nearly blended with preceding. In the female the four spots are detached and (the apical one excepted) rounded.

Mr. Champion says this species flies about bushes and flowers in openings in the

forests of the "tierra caliente" and in the hottest sunshine; it has a peculiar dancing mode of flight, almost like that of a gnat. He took a very large number of specimens, nearly all of which prove to be males. The female resembles, in the markings of the thorax and elytra, the same sex of *O. belti*; but in other respects it is widely different, being much smaller and having much shorter antennæ, the fifth joint of which is somewhat shortened and thickened towards the apex, whereas the same joint in *O. belti* is as long and as slender as the third.

16. **Ophistomis pectoralis.**

O. saltatori proxime affinis, elytrorum signaturis simillimis. Differt capite et thorace supra et infra meso- et metosternisque medio, nigris. Capite ante oculos multo breviori, transverso; thorace confertim punctulato, opaco; abdomine pectoreque lateribus rufis nitidis immaculatis; pedibus nigris, femoribus (apice excepto) flavis.

♂. Segmentum ultimum ventrale sat breve, dimidio fere basali integro, deinde profunde concavum lateribus compressis (nec lobiformiter elevatis), apice in spinam productis.

Long. $5\frac{1}{2}$ lin. ♂.

Hab. MEXICO, Cordova (*Sallé*).

Two male examples. Ticketed "*L. scalaris*, Sturm," MS., in the Sallé collection, a name which it is not advisable to adopt, as it has been applied by Say to a species now referred to an allied genus.

17. **Ophistomis felix.** (Tab. XX. fig. 5.)

♀. *O. saltatori* ♀ differt solum capite antennarumque articulis 7°–9^{m} 10°que basi, fulvo-testaceis; elytris maculis marginalibus utrinque quatuor, humeris guttaque discoidali versus scutellum, nigris.

Long. 7 lin. ♀.

Hab. PANAMA, San Feliz (*Champion*).

One example only. Found in company with *O. saltator*; it has a long but not narrow muzzle as in that species, of which it is possibly a colour-variety.

18. **Ophistomis xantho.**

Minor, postice parum angustatus, subopacus dense incumbenti-pubescens, niger; rostro basi, thorace supra (vitta dorsali nigra excepta), dimidio basali elytrorum, femoribusque (apice excepto) aurantiaco-ochraceis; capite ante oculos modice elongato; thorace campanuliformi; elytris apud suturam haud depressis, postice vix angustatis, basi quam thorax parum latioribus, apice oblique et obtuse truncatis, supra crebre punctulatis.

♂. Segmentum ultimum ventrale mox a basi late concavum, lateribus compressis (nec lobiformiter elevatis), apice obtusis.

Long. 5 lin. ♂.

Hab. MEXICO, Oaxaca (*Sallé*).

♀ (*var.*?). Postice nullomodo angustatus; elytris oblongis convexis, apice sicut in ♂ truncatis; pube densa sericeo-fulva; thorace sicut in ♂ univittato, sed elytris, corpore subtus toto, tibiis tarsisque basi aurantiaco-ochraceis.

Long. $4\frac{1}{2}$ lin.

Hab. MEXICO, Oaxaca (*Sallé*).

Undoubtedly the female of *O. xantho*, but whether a colour-variety of the species or not cannot be judged from a single example. *O. albicollis* differs similarly in the form of the elytra in the two sexes.

19. **Ophistomis hirsutus.**

Linearis vel subcylindricus, pilis elongatis et erectis dense vestitus; rostro basi thoraceque fulvo-testaceis, hoc medio infuscato; elytris nigris vel fusco-nigris, sutura plus minusve pallide fusco-marginata; capite ante oculos valde elongato et angusto, lævi; occipite subtiliter sparsim punctulato; thorace sat late campanuliformi; elytris apud suturam haud depressis, creberrime punctatis, apice oblique truncatis; antennis fusco-testaceis; coxis femoribusque (apice excepto) et interdum abdominis apice pallide testaceis.

♂. Segmentum ultimum ventrale latissime concavum lateribus elevatis, ultra segmenti apicem in lobulum angustum producto.

Long. 5 lin. ♂ ♀.

Hab. Mexico, Cordova (*Sallé*).

20. **Ophistomis (?) fulveolus.** (Tab. XX. fig. 7.)

♀. Elongatus, subcylindricus, dense breviter incumbenti-pubescens, aurantiaco-fulvus; rostro apice, antennis, femorum et tibiarum apicibus nigris; capite ante oculos elongato et angusto, thorace sat late campanuliformi; elytris basi quam thorax vix latioribus, postice haud angustatis, æqualiter convexis, apice oblique et obtuse truncatis, supra crebre punctulatis.

Antennæ fere sicut in *Ophistomi* ♀, articulis 3°–4^{m} sat elongatis et gracilibus, sed paullo longius hirsutis; tarsi postici articulo basali longissimo.

Long. 5¼ lin. ♀.

Hab. Guatemala, San Juan in Vera Paz (*Champion*).

CHORIOLAUS (to follow the genus *Ophistomis*, p. 40).

Ophistomi et *Eurypteræ* affinis. Corpus oblongum, postice plus minusve dilatatum. Caput ante oculos haud prolongatum, sed quam in *Lepturis* veris angustius. Antennæ filiformes, basi haud longe pilosæ, articulis 3° et 4° gracilibus nec perspicue abbreviatis. Thorax campanuliformis. Elytra nec depressa nec costata. Tarsi postici graciles, articulo basali elongato.

A genus formed for the reception of certain species which are intermediate in their characters between *Ophistomis* and *Euryptera*, and cannot be included in either without rendering their definition impossible. In most of their characters they agree with the genus *Chontalia*, which has similar antennæ, the third and fourth joints being linear and not shorter than the remainder taken singly; but in *Chontalia* the anterior coxæ are much less exserted, the muzzle longer, and the general form and facies different.

Only females are at present known.

1. **Choriolaus ægrotus.**

Angustus, sublinearis, dense breviter erecte pilosus, fulvo-testaceus; palpis, antennis, tibiis, tarsis, pectore et ventre (segmentorum marginibus exceptis) nigris; elytris crebre punctulatis, versus apicem paullo dilatatis, dorso subplanatis, apice obtusissime rotundatis.

Long. 4 lin. ♀?

Hab. Mexico, Peras (*Sallé*).

One example only.

2. **Choriolaus latescens.** (Tab. XX. fig. 9.)

Facies gen. *Lyci*, elytris latis oblongis apice late truncatis, angulo suturali nullo, exteriori acuto. Niger, thorace (supra et infra), elytrorum dimidio basali et femoribus aurantiaco-fulvis ; dense breviter suberecte pilosus ; capite ante oculos brevi sed angusto ; antennarum articulis 3°–5ᵐ linearibus subæqualibus ; thorace sat graciliter campanuliformi ; elytris æqualiter convexis, crebre punctulatis.

Long. $5\frac{1}{2}$ lin. ♀.

Hab. MEXICO, Oaxaca (*Sallé*).

One example only. At first sight this species would be taken for a *Euryptera*, the general form being that of *E. latipennis* ; but the filiform third and fourth joints of the antennæ and the long hind tarsi effectively separate it generically from *Euryptera*.

3. **Choriolaus nanus.** (Tab. XX. fig. 8.)

Minutus, oblongus, dense breviter pilosus, fulvo-testaceus ; antennis, elytris, tibiis, tarsis femorumque apicibus chalybeo-nigris ; capite ante oculos brevissimo et lato ; antennis filiformibus versus apicem haud incrassatis, 3° modice elongato, 4° dimidio breviori ; thorace late campanuliformi, mox ab apice dilatato, deinde usque ad basin subrecto latitudine elytris æquali ; elytris æqualiter convexis, apice singulatim rotundatis, minus crebre punctulatis.

Long. $2\frac{3}{4}$ lin. ♀.

Hab. MEXICO (*Sallé*).

One example. This species bears a strong superficial resemblance to a species of *Mordellistena* (i. e. *M. abdominalis*, ♂, of Europe).

EURYPTERA (to precede the genus *Chontalia*, p. 40).

Euryptera, Serville, Encycl. Méth. x. p. 688 (1825) ; Ann. Soc. Ent. Fr. 1835, p. 22.

An exclusively American genus, chiefly belonging to the tropical zone, but having at least one representative in North America. Lacordaire infelicitously modified the characters given by Serville (which rely chiefly on the form of the antennal joints and define a fairly natural genus), and I purposely abstain from citing his description in the 'Genera des Coléoptères.' Seven species, so far, have been described.

1. **Euryptera lateralis.**

Leptura lateralis, Oliv. Ent. no. 73, p. 22, t. 3. f. 37.
Euryptera lateralis, Crotch, Check-list Col. N. Amer. p. 90.
Leptura distans, Germ. Ins. Sp. Nov. p. 524[1].

Hab. NORTH AMERICA [1].—MEXICO, Oaxaca, Playa Vicente (*Sallé*).

2. **Euryptera costulata.**

E. laterali affinis et similis ; differt elytris utrinque bicostatis apiceque singulatim rotundatis. Gracilior, nigra, opaca ; occipite, thoracis lateribus margineque humerali elytrorum, fulvo-aureis ; capite ante oculos toto nigro ; elytris multo minus crebre punctulatis, humeris (supra visis) nigris, costis dorsalibus elongatis duabus epipleurisque abrupte verticalibus ; femoribus anticis basi tarsisque 4 posticis articulo 1° basi flavo-testaceis.

♂. Segmentum ultimum ventrale apice triangulariter emarginatum.
Long. $4\frac{1}{4}$–$5\frac{1}{2}$ lin. ♂ ♀.

Hab. MEXICO, Oaxaca, Juquila (*Sallé*), Cerro de Plumas (*Höge*).

3. Euryptera chihuahuæ.

♀. *E. laterali* affinis sed toto nigra, antennis tenuioribus, elytris grossius et crebrius asperato-punctulatis, apice obtusissime truncatis, thoraceque breviori, convexo, ante medium paullo rotundato-dilatato.
♂ (?). Thorax sicut in *E. laterali* lateribus fulvis, sed dorso convexo; antennis gracilibus, articulis 3°–6^{m} tenuibus subæqualibus.
Long. $4\frac{1}{2}$ lin.

Hab. MEXICO, Pinos Altos in Chihuahua (*Buchan-Hepburn*).

The body is clothed with rather longer and more erect hairs both on the thorax and elytra than in *E. lateralis*; the punctuation of the elytra is a little coarser and sparser, and has a rough appearance owing to the edges of the punctures being raised. It is doubtful if the male above described really belongs to this species: the difference of colour of the thorax might not be important, but it differs in outline; the other characters are the same, especially the important one of the relative slenderness of the antennæ; the elytra, though with similar peculiar punctuation, differ in their truncature, which is less obtuse and has a minute projection at its external angle.

4. Euryptera mimula.

E. laterali affinis, sed differt elytris dimidio basali aurantiaco-fulvis. Nigra, capite testaceo-fulvo (partibus oris vertice et collo nigris), thoracis lateribus elytrisque dimidio basali aurantiaco-fulvis; coxis anticis tarsisque posticis articulo primo basi testaceis; capite ante oculos sicut in *E. laterali* angusto sat prolongato; antennis (♂) crassis, basi dense longe hirsutis, articulo 3° quam 4^{us} dimidio longiori; elytris creberrime punctulatis, apice late truncatis, angulo exteriori producto acuto.
♂. Segmentum ultimum ventrale apice fere recte truncatum.
Long. $4\frac{1}{4}$ lin. ♂.

Hab. MEXICO, Cordova (*Sallé*).

5. Euryptera sericea.

Elongata, gracilis, postice gradatim sed modice dilatata, nigra, supra densissime fulvo-aureo incumbenti pubescens, sericeo-nitens; oris vertice vittaque ab occipite per thoracem et suturam usque ad medium elytrorum (ibique gradatim angustata) ducta, nigris; capite ante oculos valde angustato sed parum prolongato; thorace campanuliformi (post medium leviter constricto); elytris lævibus apice oblique truncatis; antennis latis, articulis 3°–4^{m} brevibus, triangularibus; tarsis posticis articulo 1° valde elongato basi pallido.
Long. $5\frac{3}{4}$ lin. ♂.

Hab. PANAMA, Volcan de Chiriqui 4000 to 6000 feet (*Champion*).

One example only. Resembles a slender form of Lycidæ. Much longer and narrower than *E. lateralis*, the elytra very densely and smoothly clothed with silky golden-orange laid pile, without costæ or other inequalities.

6. **Euryptera fulvella.** (Tab. XX. fig. 12.)

Elongata, postice valde dilatata et deplanata; toto ochraceo-fulva, antennarum dimidio apicali nigro, dimidio basali rufo-piceo, exceptis; suberecte sericeo-pilosa; capite ante oculos valde angustato sed parum prolongato; thorace campanuliformi, lateribus vix flexuosis; elytris apice latissime fere recte truncatis, angulis suturali et exteriori spinosis, dorso versus apicem obtuso bicostato, costulaque subsuturali acutiori, lateribus (intra marginem) usque ultra medium profunde sulcatis; antennis articulis 3°–4^{m} brevibus, oblongis, 5°–10^{m} paullo longioribus et latioribus; tarsis posticis brevibus, articulo 1° quam cæteri conjuncti vix longiori.

Long. 5½ lin. ♀.

Hab. Panama, San Feliz (*Champion*).

Beaten from bushes in the open savanna region of the low country.

7. **Euryptera patricia.** (Tab. XX. fig. 14.)

Latior, postice dilatata, pilis brevibus suberectis dense vestita, nigra; thoracis lateribus elytrisque dimidio basali fulvo-sanguineis, tuberibus antenniferis antice, coxis quatuor anticis, fulvis; capite ante oculos sat prolongato, post oculos tumido; thorace late campanuliformi lateribus valde flexuosis; elytris oblongis, prope apicem gradatim dilatatis, apice late obtuse truncatis, angulo exteriori breviter dentato, dorso sulco flexuoso a basi usque ad medium ducto; antennis articulis 3°–4^{m} brevibus subtriangularibus, 5°–10^{m} oblongis latioribus; tarsis posticis parum elongatis, articulo 1° lineari, cæteris conjunctis subæquali.

Long. 7 lin. ♂(?).

Hab. Mexico, Cordova (*Sallé*).

One example only.

8. **Euryptera princeps.** (Tab. XX. fig. 11.)

E. patriciæ affinis, magis elongata, nigra; elytris totis thoracisque lateribus sanguineis; dense breviter suberecte pilosa, thorace lætissime sericeo-nitenti; capite ante oculos lato, vix prolongato, post oculos vix tumido, angustato; elytris apice late truncatis, angulo exteriori conspicue dentato, dorso utrinque sulco subrecto a basi fere usque ad apicem extenso; antennis articulis 3°–4^{m} brevibus subtriangularibus; tarsis posticis robustis, articulo 1° haud lineari elongato-triangulari, quam cæteri conjuncti haud longiori; capite infra, prosterno, coxis anticis tuberibusque antenniferis antice fulvis.

Long. 7½ lin. ♂(?).

Hab. Panama, Volcan de Chiriqui 3000 to 4000 feet (*Champion*).

There is one example only of this handsome species, which is very closely allied to *E. patricia*, but differs from it, besides the uniform colour of the elytra, in the thorax and basal half of the elytra being much narrower. They seem both to be males.

9. **Euryptera longipennis.** (Tab. XX. fig. 13.)

Angustior, elytris relative valde elongatis, apice singulatim rotundatis convexis, ante apicem perparum dilatatis, dorso utrinque tricostatis; nigra, breviter setosa; elytris sanguineis; capite ante oculos lato et brevi, transversim quadrato, post oculos genis tumidis barbatis; thorace vix campanuliformi, anguste triangulari vel conico, postice quam elytra multo angustiori; antennis articulis 3°–4^{m} brevibus, 5°–11^{m} elongatis parum incrassatis; tarsi postici in exemplari unico desunt.

Long. 7 lin. ♂.

Hab. Mexico, Ciudad in Durango 8100 feet (*Forrer*).

Notwithstanding the difference in the form, length, and convexity of the elytra, this fine species is evidently a true *Euryptera*; the antennæ, though rather more slender than usual, are clothed towards the base with the long silky hairs characteristic of the genus.

RHATHYMOSCELIS (p. 41).

Rhathymoscelis haldemani (p. 41).

To the locality given, add :—GUATEMALA, Purula 5000 feet (*Champion*).

The single example taken by Mr. Champion has the elytra, except the tips, testaceous yellow, and the membranous wings fulvous hyaline.

The specimen was captured on the wing in the virgin forest.

MERIONŒDA.

Merionœda, Pascoe, Trans. Ent. Soc. ser. 2, iv. p. 237 (1857).
Oxycoleus, Lacordaire, Gen. Col. viii. p. 484, 1869 (ante, p. 41).
Stenoptrellus, Bates, Trans. Ent. Soc. 1870, p. 314.

The structural characters of *Merionœda* and *Oxycoleus* in both sexes offer no essential difference; and united they form a well-marked and most interesting genus, allied to the European and North-American genus *Callimus*. Fourteen species are known, confined to the Indo-Malayan and Tropical American regions.

2. **Merionœda culicina.** (Tab. XX. fig. 18.)

Stenoptrellus culicinus, Bates, Trans. Ent. Soc. 1870, p. 315 [1].

Hab. PANAMA, Chorcha near San Lorenzo (*Champion*).—SOUTH AMERICA, Amazons [1].

A single specimen of this species flew on to Mr. Champion's neck while he was travelling on horseback through the forest of Chorcha.

3. **Merionœda gratiosa.** (Tab. XX. figg. 16 ♂, 17 ♀.)

Nitida; capite supra grosse punctato, thorace antice modice angustato, supra 4-tuberculato, fere lævi, antice parum angustato; elytris postice valde angustatis divaricatis, apice acutissimis, dorso depressis sat grosse punctatis; femoribus posticis longe pedunculatis, crasse et abrupte clavatis; tibiis posticis extus apice spina elongata armatis.

♂. Niger (thorace medio rufescente); abdomine sanguineo, femoribus posticis pedunculo fulvo-testaceo; elytris viridi- vel cyaneo-æneis.

♀. Læte corallina; antennis, tibiis tarsisque posticis nigris; elytris viridi-æneis.

Long. 5–5½ lin.

Hab. MEXICO, Cerro de Plumas (*Höge*).

Var. (?) ♂. Differt corpore infra toto (prosterno antice nigro excepto) thoraceque sanguineis.

Hab. MEXICO, Ventanas (*Forrer*).

The male variety has the closest possible similarity to the typical form of the same

sex, except its trifling differences of colour; but it differs in its antennæ being much longer than the body (the joints 5–11 being each much longer than 3 or 4), whilst in the type they are scarcely so long as the body.

OXYLYMMA (to precede the genus *Rhinotragus*, p. 41).

Oxylymma, Pascoe, Trans. Ent. Soc. ser. 2, v. p. 21 (1859).

Oxycalymma, Gemm. & Harold, Cat. ix. p. 2888.

Three or four species of this curious genus are known, all from Tropical America.

1. **Oxylymma championi.** (Tab. XX. fig. 10.)

O. lepidæ affinis. Erecte pilosa, flavo-testacea; capite supra (rostro excepto) thoraceque nigris, hoc medio fascia flava; elytris nigris, utrinque macula ovata prope basin, fascia recta post medium, apice et marginibus lateralibus angustis, flavo-testaceis; rostro lato sat prolongato; vertice grossissime punctato, genis post oculos quadratis, collo constricto; thorace sat angusto, post medium rotundato-dilatato, antice valde angustato, basi sulcato-constricto, dorso lævi, medio tuberculo angusto valde elevato; elytris oblongis planatis, apice singulatim acuminatis, apud suturam paullo divaricatis, supra crebre punctatis; antennis flavo-testaceis, articulis 1°–4^{m} extus 6°–11^{m} totis fuscis; pedibus flavis extus fuscis; corpore subtus flavo, metasterno nigro.

Long. $4\frac{1}{2}$ lin.

Hab. Guatemala, Cubilguitz in Vera Paz 1000 feet (*Champion*).

One example, captured in the forest.

OMMATA (p. 42).

5. **Ommata cyanea.**

O. championellæ proxime affinis. Gracilis, subtus cærulea, supra violacea, griseo-pilosa; elytris vitta indistincta pallido-testacea; thorace angusto, cylindrico, grosse confluenter punctato; elytris abdominis apicem fere attingentibus, a medio usque ad apicem angustis, linearibus apice truncatis, æqualiter punctulatis parum nitidis; corpore subtus subtiliter punctulato, nitido; femoribus posticis valde elongatis gradatim incrassatis, tibiis dense hirsutis; antennis quam corporis dimidium paullo longioribus, gradatim incrassatis.

Long. $6\frac{1}{2}$ lin. ♀.

Hab. Mexico, Cordova (*Sallé*).

Named *Oregostoma cyaneum*, Chevr. MS., in the Sallé collection.

6. **Ommata iodes.**

O. asperiventri (Bates) proxime affinis. Gracilior, nigro-violacea; capite, pedibus antennisque chalybeis; thorace late ovato fere spherico, grosse punctato, opaco; elytris fere linearibus, angustis absque epipleuris, apice truncatis, supra depressis confertim confluenter punctatis, lateribus haud costatis; corpore subtus confertissime striguloso, partim punctulato; femoribus posticis modice elongatis, gradatim incrassatis; antennis corporis dimidium vix attingentes, articulis 5°–10^{m} crassioribus subserratis.

Long. 5 lin.

Hab. Panama, San Feliz (*Champion*).

One example only, apparently a male.

7. **Ommata sallæi.** (Tab. XX. fig. 15.)

O. (*Agaone*) *notabili* affinis sed tarsorum posticorum articulo primo haud elongato. Flavo-testacea; pectore aureo-pubescenti, thorace macula discoidali nigro; elytris pallide fuscis, macula triangulari circumscutellari flavo-testacea; capite ante oculos valde prolongato, thorace cylindrico ante medium perparum dilatato, grosse, apud maculam confluenter, punctato; elytris quam corpus paullo brevioribus, planis, confertissime confluenter punctatis, opacis, apice truncatis; corpore subtus flavo, ventris segmentis 3°–4^{m} nigro-fasciatis; pedibus flavis, femoribus 4 posterioribus nigro-annulatis, genubus tibiisque apice nigris; antennis haud incrassatis, flavis fusco-maculatis.

Long. 6 lin. ♀.

Hab. Mexico, Cordova (*Sallé*).

One example only.

ODONTOCERA (p. 42).

5. **Odontocera fasciata.**

Necydalis fasciata, Oliv. Ent. no. 74, p. 10, t. 1. fig. 9 [1].
Odontocera chrysozone, White, Cat. Long. Col. B. M. p. 192, t. 5. fig. 5 [2].
Odontocera fasciata, Bates, Trans. Ent. Soc. 1870, p. 324 [3].

Hab. Panama, San Feliz (*Champion*).—South America [1], Amazons [2 3].

Mr. Champion's specimens were captured in the open scrubby forest of the coast region flying in the hottest sun near the ground, and in company with a small wasp, from which, on the wing, this insect cannot be distinguished.

6. **Odontocera fuscicornis.**

O. petiolatæ affinis. Nigra; antennis castaneo-rufis, pedibus castaneo-fuscis, elytris hyalinis flavo-testaceis, marginibus angustis fasciaque obliqua prope basin, nigris; ventris basi plagis pallidis; thorace cylindrico-ovato, versus basin paullo angustato, alveolato-punctato, marginibus argenteo-sericeis; elytris abdominis dimidium haud excedentibus; femoribus posticis gradatim clavatis, tibiis undique sparsim hirsutis; antennis brevibus.

Long. 5½ lin.

Hab. Mexico, Cordova (*Sallé*).

7. **Odontocera apicula.** (Tab. XX. fig. 24.)

O. compressipedi simillima; differt elytris multo abbreviatis, a medio subulatis. Flavo-testacea; vertice thoracis, fascia lata mediana et macula utrinque prope basin elytrorum, nigris; tibiis posticis incrassatis densissime hirsutis, basi excepta, nigris; antennis fuscis, articulis plerumque subtus testaceis; thorace transversim ovato, alveolato-punctato; elytris abdominis dimidium haud excedentibus, basi latis, pone medium sat rapide (intus et extus) angustatis apice truncatis, macula basali confertim punctata, cætera superficie vix punctulata hyalina, margine laterali anguste carinato et versus basin nigra; corpore subtus flavo, prothorace subtus medio, metasterno ventrisque lateribus, nigris.

Long. 4½ lin. ♂.

Hab. Panama, San Feliz, Bugaba (*Champion*).

Two examples. In colours and markings and in the dilated and hairy hind tibiæ this species closely resembles *O. compressipes*, White, from the Amazons; both equally

mimic a *Melipona* bee of the same localities. In *O. compressipes* the elytra pass the tip of the third ventral segment; in *O. apicula* they do not reach the end of the second segment, and are rapidly narrowed (both edges equally contracted) from about the middle.

ACYPHODERES (p. 43).

Acyphoderes acutipennis (p. 43).

To the locality given, add:—MEXICO, Cordova (*Höge*).

3. **Acyphoderes olivieri.** (Tab. XX. fig. 21.)

Acyphoderes olivieri, Bates, Trans. Ent. Soc. 1870, p. 328[1].

Hab. NICARAGUA, Chontales (*Janson*).—SOUTH AMERICA, Peru, Cayenne, Amazons[1].

4. **Acyphoderes velutinus.** (Tab. XX. fig. 19.)

A. acutipenni affinis; differt elytris basi angustioribus, capite thoraceque nigris velutino-opacis, hoc solum callo elongato dorsali fulvo. In hoc genere angustus, niger; antennis castaneo-rufis, scapo nigro, pedibus nigro-fuscis, femoribus quatuor anticis tibiisque subtus testaceo-fulvis; thorace subcylindrico, ante medium paullo rotundato-dilatato; elytris sicut in *A. acutipenni* flavo-testaceis, elongato-subulatis apice truncatis, subtiliter sparsim setifero-punctulatis, politis; corpore subtus nigro, ventris segmento primo rufo-testaceo; antennis brevibus, articulis 6°–10^{m} paullo latioribus, serratis.

Long. 7½ lin. ♂.

Hab. GUATEMALA, El Reposo (*Champion*).

Two examples, males, captured on flowers in a forest-clearing in the low hot Pacific-coast region. Narrower, especially across the base of the elytra, than *A. acutipennis*, and resembling an *Odontocera* rather than an *Acyphoderes*; but the elevated central callus of the thorax, the much-narrowed elytra, the strongly tumid club of the middle femora, and the form of the antennal joints, show that it belongs to the latter genus.

5. **Acyphoderes suavis.** (Tab. XX. fig. 20.)

Elongatus, gracilis, fulvescenti-rufus; elytris fulvo-testaceis, circum scutellum pallidioribus; pectore medio, femoribus 4 anterioribus supra, 2 posterioribus annulo mediano tibiisque macula, nigris; thorace breviter cylindrico-ovato, callo elongato dorsali alteris duobus parvis lateralibus, paullo elevatis, confertissime punctato, marginibus anticis et posticis aureo-pubescentibus; scutello aureo-pubescenti; elytris basi sat angustis, segmentum secundum ventrale paullo excedentibus, gradatim angustatis, nec subulatis, apice recte truncatis, supra discrete sat conspicue punctulatis nitidis; antennis brevibus, articulis 4°–7^{m} dilatatis serratis, 8°–11^{m} minoribus.

Long. 8 lin.

Hab. MEXICO, Cordova (*Sallé*).

PHESPIA (p. 44).

Phespia corinna (p. 44). (Tab. XX. fig. 25.)

We now give a figure of this remarkable species.

TOMOPTERUS (p. 44).

Tomopterus vespoides (p. 44).

To the locality given, add :—PANAMA, Taboga Island (*Champion*).

White described the female of this species from Guatemala. The single specimen taken as above by Mr. Champion is a male, and differs from the female by the elytra having each an oblique line and the lateral margins (narrowly) reddish testaceous, instead of the entire outer half being of that colour. The species is distinguished in both sexes from the very closely allied *T. larroïdes* from the Amazons by the abdomen beneath being ringed with bright yellow. This species, when alive and at rest, very closely resembles hymenopterous insects of the same locality.

STENOPSEUSTES (p. 44).

Stenopseustes sericinus. (Tab. XX. fig. 22.)

To the Mexican locality given, add :—Cordova (*Sallé*).

AMPHIONTHE (to precede the genus *Callichroma*, p. 45).

Amphionthe, Bates, Cistula Entomologica, ii. p. 395.

One species only of this very distinct genus has previously been described. It is from Colombia.

1. **Amphionthe brevicollis.** (Tab. XX. fig. 23.)

Callichromæ cosmicæ similis; postice vix angustata, viridi-metallica, thorace elytrisque nigro-velutinis, his sutura nitide, lineisque utrinque obscurius, viridi-metallicis; antennis nigris; pedibus nigris, femoribus 4 anticis totis, 2 posticis dimidio basali, rufis; thorace transversim quadrato, lateribus medio late et obtuse tuberculato, dorso inæqualiter tuberoso; elytris apice late flexuoso-truncatis angulo exteriori producto; corpore subtus tenuiter argenteo-sericeo.

Long. 11 lin. ♂ ♀.

Hab. MEXICO (*Sallé*).

A female example in the Sallé collection is labelled "n. g. *brevicollis*, Chevr."; a male in my collection was received from Deyrolle. It may be distinguished at once from *Callichroma cosmica* by the compressed, scarcely dilated, and densely hirsute hind tibiæ. The typical species, *A. doris*, has black femora and a broad metallic-green stripe on the sides of the elytra.

CALLICHROMA (p. 45).

Callichroma sapphira (p. 46).

Callichroma plicata (p. 45), nec Leconte.

Further examples of this species (described from a single specimen) show that the

ordinary colour of the insect is bright metallic green; the dark blue colour is therefore exceptional or accidental. The Sonora specimen recorded under *C. plicata* further proves to be not the Texan species, but the bright green typical form of *C. sapphira*. The femora are always red to the tips, and black or dusky only at the base.

To the locality given, add:—MEXICO, Sonora (*coll. Bates*), Presidio, Ventanas (*Forrer*), Oaxaca (*Höge*), Tehuantepec (*Sumichrast*), Soconusco (*Flohr*).

Callichroma holochlora (p. 46).

To the localities given, add:—GUATEMALA, Coban (*Sallé*), Cerro Zunil, El Tumbador, Rio Maria Linda (*Champion*); PANAMA, Volcan de Chiriqui (*Champion*).

A very common though somewhat local species in Central America, and found flying about felled timber in the hot sun in fresh forest-clearings.

Callichroma melancholica (p. 46).

To the localities given, add:—MEXICO, Cordova (*Sallé*), Misantla (*Höge*); BRITISH HONDURAS (*Blancaneaux*).

Var. Femora 4 anteriora supra macula, 2 posteriora annulo lato prope basin, obscure rufis.

Hab. GUATEMALA, Senahu (*Champion*).

The type form was captured in great abundance by Herr Höge at Misantla.

9 (A). **Callichroma purpurata.**

Callichroma purpuratum (Chevrolat), Lameere, Ann. Soc. Ent. Belg. xxviii. p. 106[1].
Callichroma iris, Taschenberg, Zeitschr. ges. Naturw. i. 1870, p. 194[2].

Hab. COSTA RICA? (*Van Patten*); PANAMA [1], Volcan de Chiriqui, Peña Blanca, Tolé (*Champion*).—SOUTH AMERICA, Colombia, Venezuela, Ecuador [2].

Mr. Champion's specimens have less of the purple lustre on the upper surface than is usual in Venezuelan examples; the under surface and the sides of the thorax are more or less golden coppery. They resemble in colours an individual with which I have compared them from Colombia. The examples stated to be from Costa Rica are almost exactly conformable to the Venezuelan type, being purplish above and with the sides and under surface of the thorax more or less purple-coppery. Found in Chiriqui at elevations of 3000 to 4500 feet; other examples were seen, but not captured, at Peña Blanca flying about the tops of flowering forest-trees.

Callichroma aureotincta (p. 46).

To the localities given, add:—MEXICO, Vera Cruz (*Sallé*).

A single specimen in the Sallé collection from Vera Cruz is either immature or a singular

colour-aberration; the whole upper surface, including the basal joint of the antennæ, being reddish tawny, with the exception of the disc of the thorax, which is metallic green, and there are two narrow dusky stripes on each elytron, which are the remains of the broad velvety-black vittæ (one discoidal, the other marginal) of *C. aureotincta*. The sculpture of the thorax, finely alutaceous on the disc and transversely striate on the sides, and the well-developed lateral spine, the scarcely produced exterior apex of the scape, and the red femora are the same as in the type-form. The only difference is the very slightly broader, compressed hind tibiæ*.

Callichroma rugicollis (p. 46).

To the localities given, add:—Mexico, Plan del Rio, Misantla, Cerro de Plumas (*Höge*); Panama, near the city (*J. J. Walker*), Bugaba, San Feliz (*Champion*).

Mr. Champion's Bugaba examples were found about the flowers of a large leguminous tree bearing an edible fruit (locally known as "guaco").

12. **Callichroma novella.**

C. rugicolli proxime affinis et similis; differt thorace minute punctato nec transversim striato, disco utrinque nigro-velutino, femoribusque posticis dimidio apicali nigro.

Long. 9 lin.

Hab. Nicaragua, Chontales (*Belt*).

Two examples. The insect is rather more elongate, in proportion to its width, than *C. rugicollis*. The thorax has very feebly developed lateral tubercles, and the scape is only slightly produced at the exterior apical angle.

13. **Callichroma buprestoides.**

Læte viridi-ænea; scapo femoribusque rufis, coxis rufo-maculatis, elytris fulvo-fusco pubescentibus, utrinque costis angustis (altera discoidali altiori, altera submarginali) suturaque viridi-æneis; scapo apice extus vix producto; thorace subtilissime alutaceo-ruguloso, sparsim fulvo-pubescenti; antennis (scapo excepto), tibiis et tarsis nigris; corpore subtus fere nudo.

Long. 18 lin. ♀.

Hab. Mexico, Cordova (*Sallé*).

One example only of this fine and distinct species.

PHYMATODES (to follow the genus *Coremia*, p. 47).

***Phymatodes*, Mulsant, Col. de France, Long. ed. 1. p. 47; Lacordaire, Gen. Col. ix. p. 53.**

An ill-defined genus, scarcely distinguished from *Callidium*. About a dozen species have been referred to it, all of which are from the North Temperate zone.

* In the remarks on this species at p. 46 a misprint occurs; it is with *C. rugicollis* that I compared the species, not *C. nigr icollis*.

1. Phymatodes varius.

Callidium varium, Fabr. Sp. Ins. i. p. 241 [1].
Phymatodes varius, Crotch, Check List N. Am. Col. p. 84 [2].

Hab. North America [1 2].—Mexico, Northern Sonora (*Morrison*).

CYLLENE (p. 47).

Cyllene erythropus (p. 47).

To the localities given, add:—Mexico, Alamos (*Buchan-Hepburn*), Ventanas (*Forrer*), Guanajuato (*Sallé*), Almolonga (*Höge*).

The single example from Alamos is very large and fine (11 lines), with broad yellow thoracic fasciæ.

Cyllene guttata (p. 47).

To the localities given, add:—Mexico, Las Vigas, Almolonga (*Höge*); Guatemala, La Gavia, Cahabon, Rio Maria Linda, Cerro Zunil, Mirandilla, Paraiso, El Reposo (*Champion*); Panama, Volcan de Chiriqui, Bugaba (*Champion*).

Cyllene crinicornis (p. 47).

To the localities given, add:—Mexico, Tuxtla, Izucar (*Sallé*), Guajuco in Nuevo Leon (*Dr. Palmer*); Guatemala, San Isidro (*Champion*); Nicaragua (*Sallé*), Chontales (*Belt*); Panama, Tolé, San Feliz, Nancito, Bugaba (*Champion*).

Common on felled or fallen timber in the more open parts of the forest-region of the "tierra caliente" of Chiriqui (*Champion*).

The three preceding species are almost exactly alike in colours and markings, and are with difficulty distinguished. Of the characters mentioned by Chevrolat the chief are the number of the narrow yellow belts of the thorax, which are four in *C. crinicornis*, and three in *C. erythropus* and *C. guttata*; the two last named are distinguished from each other by general form, *C. erythropus* being relatively much broader, especially at the base of the elytra. I find the shape of the yellow spot on the pygidium to be a good differentiating character; it is a narrow line in *C. erythropus*, and a large oval spot in *C. guttata*.

The differences may be more readily seen in the following table:—

Thorax fasciis flavis tribus.	
Elytra latiora, pygidium linea angusta flava	*C. erythropus.*
Elytra angustiora, pygidium macula lata flava	*C. guttata.*
Thorax fasciis flavis quatuor	*C. crinicornis.*

Cyllene mexicana (p. 47).

This species is doubtful. Chevrolat, in his monograph, simply records it without remark, and it is not contained in the Sallé collection.

Cyllene cayennensis (p. 48).

To the localities given, add:—GUATEMALA, La Tinta in the Polochic valley (*Champion*).

This species has only been recorded as yet from the Atlantic slope.

7. Cyllene panamensis.

C. cayennensi proxime affinis; differt solum antennis, pedibus et partibus oris testaceo-rufis, ventreque utrinque trimaculato.

Long. $4\frac{1}{2}$ lin.

Hab. PANAMA, Bugaba (*Champion*).

Belongs to the subgroup which embraces *C. acuta*, *C. cayennensis*, *C. caracasensis*, and *C. amazonica*, which might almost be considered as so many local varieties of one and the same species. The colour is silky black, with three thoracic and four elytral fasciæ (besides a short streak along the suture at the apex) ashy yellow; the second and third elytral fasciæ are curved forward towards the suture, and are prolonged a little on the latter towards the base, and the fourth fascia is broken into a spot on the suture, and an oblique line across the disc. The reddish colour of the legs and the antennæ alone would scarcely suffice to distinguish the present form as a variety, but the character is supported by the ventral segments having three large yellow spots on each side, instead of two.

8. Cyllene antennata.

Clytus antennatus, White, Cat. Long. Col. Brit. Mus. ii. p. 252 (1855)[1].

Arhopalus eurystethus, Leconte, Proc. Ac. Phil. 1858, p. 82[2]; id. in Thomson's Arcana Naturæ, p. 127, t. 13. f. 9.

Hab. NORTH AMERICA[1].—MEXICO, Sonora[2] (*Schott*, *Morrison*).

9. Cyllene —— ?

A specimen, with the apex of the elytra and abdomen wanting, taken by Dr. Palmer at Monclova in Coahuila, belongs to the same section of *Cyllene* which includes *C. robiniæ* and other North-American species, *i. e.* the section in which the sides of the thorax near the base are rounded. In colour-markings it differs little from the *C. erythropus* group.

TRICHOXYS (p. 48).

Trichoxys pellitus (p. 48).

To the Mexican localities given, add:—Durasnal (*Sallé*).

Trichoxys vitticollis (p. 49).

The specimens of this species, and also of *T. sulphurifer*, in the Sallé collection are labelled as from Guanajuato; an example of *T. apelles* in the same collection is labelled Playa Vicente.

Trichoxys westwoodi (p. 50).

To the locality given, add:—MEXICO, near the city, Playa Vicente (*Höge*).

Trichoxys abbreviatus (p. 50).

To the locality given, add:—MEXICO (*Sallé, ex coll. Sturm*); GUATEMALA, Quezaltenango 7800 feet (*Champion*).

Trichoxys tricolor (p. 50).

To the localities given, add:—GUATEMALA, Cerro Zunil, El Tumbador, San Joaquin, Panajachel, Volcan de Atitlan; COSTA RICA (*Van Patten*).

Mr. Champion always found this species on flowers on the margins of the forest.

Trichoxys hartwegi (p. 50).

To the Mexican localities given, add:—Northern Sonora (*Morrison*), Pinos Altos in Chihuahua (*Buchan-Hepburn*), Chiapas, Tepansacualco (*Sallé*).

OCHRESTHES (p. 50).

Species of this genus, Mr. Champion informs me, are found upon flowers (especially of small low-growing Compositæ bearing yellow flowers) in open sunny places, and usually away from the vicinity of the forest.

Ochresthes obliquus (p. 51). (Tab. XXI. fig. 2.)

To the locality given, add:—MEXICO, Jalapa, Las Vigas (*Höge*).

Distinguished from the allied species by the narrow, nearly straight, dusky belt near the base of the elytra, extending, as Chevrolat expresses it (but only in well-developed individuals), from one humeral callus to the other. I have seen no specimen in which this fascia is wanting, as Chevrolat says it is in the female; but a dark variety occurs in which the five dusky oblique fasciæ are more or less blended together (the dark colour being thus diffused over the whole elytra, leaving only a narrow basal margin), and there is an oblique spot before the middle on each side, and a rounded spot on the suture towards the apex, of the ochreous ground-colour.

Ochresthes sommeri (p. 51).

To the Mexican locality given, add:—Guanajuato, Puebla (*Sallé*).

I suspect *O. circuliferus*, Chevr. (p. 51), to be nothing more than a colour-variety of this species; the descriptions of both are the same with regard to the annular shape of the twin black fascia near the base, which is shown in all the numerous examples of *O. sommeri*, and is highly characteristic.

Ochresthes citrinus (p. 51).

According to examples (one of which is from Puebla), no doubt authentically named, in the Sallé collection this species resembles *O. sommeri* in the elytral markings, which consist of two twin dusky fasciæ enclosing spaces of a lighter ochreous than the ground-colour, one pair a considerable distance from the base (the basal space being quite free from dusky lines), the other pair at a similar distance from the apex; the difference between the two species is that the basal fasciæ in *O. citrinus* reach from the margin nearly to the suture, and are sharply triflexuous, in *O. sommeri* they form a transversely oval dusky ring enclosing a rounded ochreous spot. There is, however, an important structural difference relatively between the two species—the elytra in *O. citrinus* being much longer and obliquely sinuate-truncate, with acutely produced external angles; in *O. sommeri* they are broadly and transversely truncated.

Specimens labelled *O. z-littera* in the Sallé collection do not differ in the slightest from *O. citrinus*, but they do not agree with Chevrolat's description.

Ochresthes pollinosus (p. 51).

To the localities given, add:—MEXICO, Jalapa (*Höge*), Chiapas (*Sallé*); GUATEMALA, Mixco 5500 feet (*Champion*); PANAMA, Tolé, Peña Blanca (*Champion*).

Found on the similarly coloured flowers of small low-growing plants in open sunny places, often in the sugar-cane fields (*Champion*).

Ochresthes cristoforii (p. 51).

Specimens of this species in the Sallé collection are labelled as from Cuernavaca.

Ochresthes tomentosus (p. 52).

The exact locality of this Mexican species is Puebla, according to the Sallé collection.

Ochresthes viridiventris (p. 52). (Tab. XXI. fig. 5.)

We now give a figure of the unique type of this species.

14. **Ochresthes umbratilis.** (Tab. XXI. fig. 3.)

Quoad formam *O. obliquo* simillimus, sed differt colore fusco-ochraceo signaturisque fuscis elytrorum indistinctis. Valde elongatus, elytris apice singulatim acuminatis, vel ad suturam conjunctim emarginatis; fuscescenti-ochraceus, subtus sulphureo-cinereus; thorace disco obscuriori; elytris utrinque fasciis plus minusve vagis quatuor fuscis, quarum duo obliquæ ante medium maculam elongatam pallidiorem includent duoque post medium indistinctæ maculam juxta suturam pallidiorem amplectent; antennis (scapo nigro excepto) pedibusque piceo-nigris.

Long. 5–8 lin.

Hab. GUATEMALA, Quezaltenango 7500 to 8500 feet (*Champion*).

Taken in some numbers by Mr. Champion in the yellow flowers of a composite plant in open places in scrubbily wooded districts during the dry season.

15. **Ochresthes sigmoideus.** (Tab. XXI. fig. 4.)

O. pollinoso latior et differt elytris apice vix attenuatis obtuse truncatis. Robustus, ochraceus, subtus cinereo-ochraceus, thorace fascia angusta fusca mediana; elytris fasciis quinque fusco-nigris, viz. 1ª prope basin multiflexuosa, 2ª et 3ª antemedianis signaturam bilobam transversam efficientibus, 4ª et 5ª post medium valde flexuosis medio per ramum conjunctis et signaturas S-formes efficientibus; antennis pedibus rufescentibus, his versus apicem fuscis in ♀ incrassatis.

Long. 7 lin. ♂ ♀.

Hab. MEXICO, San Luis Potosi (*Dr. Palmer*).

Fully-coloured examples may be distinguished from all other species of the *O. pollinosus* group by the narrow black fascia near the base of the elytra, which runs from shoulder to shoulder with many undulations. But most of the examples sent have indistinct or partly obsolete elytral and thoracic markings; these are distinguishable from similar specimens of the equally robust *O. sommeri* only by the broader and almost spherical thorax, by the antennæ in the female much thickened towards the apex, and the relatively longer elytra. *O. pollinosus* is always much narrower, and with elytra tapering near the apex, the apex itself obliquely and sharply truncated.

16. **Ochresthes zebratus.** (Tab. XXI. fig. 1.)

Ochraceo-flavus, thorace disco elytrisque fasciis angustis septem paullo obliquis, æquidistantibus, quarum 2ª et 3ª suturam haud attingent, nigris; antennis nigris, scapo fulvo articulisque 2°–4ᵐ piceo-rufis, pedibus fulvis; elytris apice versus suturam breviter oblique truncatis angulo exteriori producto acuto.

Long. 7 lin. ♀.

Hab. GUATEMALA, Coban (*Champion*).

One example only of this distinct species.

17. **Ochresthes litura.**

O. tomentoso similis; major, ochraceo-cinereus, elytris versus apicem angustatis apice oblique sinuato-truncatis, angulo exteriori longe producto, utrinque post medium litura Λ-formi (extus dilatata) nigra; antennis pedibusque rufo-testaceis; pectore nigro ventreque rufo-testaceo.

Long. 6 lin. ♂ ♀.

Hab. GUATEMALA (*Sallé*).

Mr. Champion did not meet with this species; the precise locality is not indicated on the examples in the Sallé collection.

DEXITHEA (p. 53).

Dexithea klugi (p. 53).

To the locality given, add:—MEXICO, Izucar (*Sallé*); GUATEMALA (*Sallé*), San Gerónimo (*Champion*).

Dexithea fabricii (p. 53).

To the Mexican localities given, add:—Almolonga (*Höge*).

PLAGIONOTUS (p. 53).

Plagionotus aztecus (p. 53).

To the locality given, add:—Cordova (*Höge*).

CLYTUS (p. 54).

Clytus dimidiaticornis (p. 54).

To the Mexican localities given, add:—Misantla (*Höge*).

Mr. Champion has compared a Mexican specimen (named, I believe erroneously, *C. montezuma* in the Sallé collection) with Chevrolat's type in the British Museum, and finds that the elytra have five yellow fasciæ, and not six as stated by Chevrolat, the base not having a distinct yellow border.

CLYTANTHUS (p. 54).

5. **Clytanthus ochrozona.** (Tab. XXI. fig. 6.)

Cylindricus, niger; pronoto ochraceo incumbenti-pubescenti, elytris fasciis duabus rectis latis (1ª paullulum ante, 2ª longe post medium) apiceque lætius ochraceis; capite, antennis, pedibus corporeque subtus subtiliter griseo-pubescentibus, metasterni episternis segmentisque 1°–2ᵐ ventralibus utrinque cano-tomentosis, segmentis 3°–5ᵐ nigris nitidis; capite angusto; thorace ovato, æquali; elytris apud suturam postice depressis discoque obtuse costato, apice oblique truncatis; pedibus posticis haud prolongatis, gracilibus. Long. 6 lin.

Hab. GUATEMALA, San Gerónimo (*Champion*).

One example. Found on flowers in open places in company with *Ochresthes pollinosus*.

Forms, with *C. clathratus*, *C. truquii*, and *C. anthophilus* (*C. nigropunctatus* I have not seen), a distinct group, perhaps generically distinct from *Clytanthus*, and to which *Trichoxys tricolor* might be added, distinguished from typical *Clytanthus* by the depressed suture and subcostate elytra, in which it approaches *Ochresthes*, *Trichoxys*, and *Cyllene*.

MECOMETOPUS (p. 55).

Mecometopus jansoni (p. 55).

To the locality given, add:—PANAMA (*Boucard*), Bugaba, Nancito, Tolé (*Champion*).

Taken in plenty by Mr. Champion on felled timber in recently burned clearings, in the forest-region of the low country at the commencement of the rainy season.

Mecometopus ion (p. 56).

To the localities given, add:—MEXICO, Almolonga (*Höge*); BRITISH HONDURAS (*Blancaneaux*).

The type specimen, unique, was found, according to its describer, Chevrolat, in the neighbourhood of the city of Mexico. It is singular that the only example I have seen which comes pretty close to Chevrolat's figure is one from British Honduras. A Mexican specimen from Almolonga differs in the apical portion of the elytra, except its margins, being black. The Chontales form is a tolerably distinct variety, which may be named *M. ionides*.

Mecometopus macilentus (p. 56).

To the locality given, add:—PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

Taken at Bugaba in company with *M. jansoni*.

6. **Mecometopus remipes.** (Tab. XXI. fig. 7.)

M. œsopo affinis et similis at differt elytrorum signaturis. Cylindricus, grisescenti-niger; elytris tertio apicali cinerea vittisque griseis nigro-cinctis duabus ante medium (a basi distantibus) quarum una suturali, apice extus dentata, secundaque mox exteriori obliqua; thorace cristis granulatis longitudinalibus tribus; elytris crista centro-basali minus elevata, apice late truncatis et utrinque breviter bidentatis; pedibus posticis valde elongatis, femoribus quam in *M. œsopo* paullo abruptius clavatis, tibiis compresso-dilatatis; meso- et metasterni episternis utrinque macula ventrisque segmentis 1°–2^{m} albo-cinereis, ventris apice pallide fusco.

Long. 4 lin.

Hab. PANAMA, Bugaba, Volcan de Chiriqui (*Champion*).

7. **Mecometopus melanion.**

M. ioni quoad formam et signaturas simillimus sed coloribus valde diversis. Niger, fronte (verticali parum elongato) vittis duabus flavo-cinereis; thorace (oblongo-ovato convexo) marginibus anticis et posticis fasciaque angusta mediana apud discum interrupta et antice angulatim hamata; scutello cinereo; elytris fasciis tribus cinereo-flavis, fascia 1^{a} a basi distanti a sutura retrorsum obliqua, 2^{a} mediana transversa apud suturam dilatata et antice prolongata, 3^{a} transversa ante apicem, apiceque macula parva cinerea; corpore subtus cinereo, ventris segmentis 1°–4^{m} basi, 5° toto nigris; pedibus posticis valde elongatis, femoribus gradatim modice clavatis apice bidentatis, tibiis gracilibus; antennis elongatis perparum incrassatis.

Long. 5 lin.

Hab. MEXICO, Cerro de Plumas (*Höge*).

One example. The ashy-yellow markings of the thorax and elytra, with the exception that they are narrower on the thorax and that the base and nearly the entire apical space after the third fascia are black, are exactly the same as in *M. ion*.

8. **Mecometopus solidicornis.**

Neoclyto moritzi (Thoms.) quoad elytrorum signaturas haud dissimilis, sed antennis 8-articulatis valde discrepat. Parvus subcylindricus, niger; elytris castaneo-fuscis, basi fasciisque angustis tribus (1^{a} et

2ª ante medium antrorsum versus suturam obliquis parallelis, 3ª post medium recta) flavis; fronte verticali plana, parum elongata sed infra angustata, fulvo-fasciata; thorace breviter ovato, basi constricto, marginibus antico et postico anguste flavis, crista medio-dorsali modice elevata vix asperata; elytris apice truncatis; pedidus fusco-rufis, femoribus posticis gradatim clavatis, tibiis filiformibus; meso- et metasternis segmentisque 1°–2ᵐ ventralibus flavo-fasciatis.

Long. 3½ lin.

Hab. PANAMA, Volcan de Chiriqui (*Champion*). One example.

In the shortness of the forehead and the markings of the elytra this species resembles the *Neoclyti* more than the *Mecometopi*, but the nearly smooth, convex thorax, and especially the short clavate antennæ, in which the joints seven to eleven are consolidated into one with only faint traces of articulation, lead me to refer it to *Mecometopus*, in which genus alone a similar antennal structure is found.

NEOCLYTUS (p. 57).

Neoclytus cacicus (p. 57).

To the localities given, add:—MEXICO, Almolonga, Cerro de Plumas (*Höge*); GUATEMALA, El Reposo, Volcan de Atitlan, La Tinta, Panzos, Chacoj, Mirandilla, Torola (*Champion*); SALVADOR (*Sallé*); PANAMA, Volcan de Chiriqui, Bugaba, David, Tolé, San Lorenzo (*Champion*).

A common species in the forest-region of the low country (both on the Pacific and Atlantic slopes) of Guatemala and the State of Panama.

Neoclytus angusti (p. 57).

To the Mexican localities given, add:—Cordova (*Sallé*), Jalapa, Almolonga, Playa Vicente, Paso del Macho (*Höge*), Tres Marias Islands (*Forrer*).

Neoclytus mundus (p. 58).

The type specimen shows all the characters of the genus *Mecometopus*, the forehead being very long and narrow.

7 (A). **Neoclytus beltianus.** (Tab. XXI. fig. 10.)

Neoclytus lebasi (p. 58), nec Chevrolat.

N. lebasi affinissimus, sed differt thorace disco flavo-trilineato maculaque laterali flavo (nec basi maculato), fascia quoque elytrorum anteapicali recta (nec obliqua) apiceque flavo marginato; colore fundo castaneo-fusco nec nigro.

Long. 7–8 lin.

Hab. NICARAGUA, Chontales (*Belt, Janson*).

Neoclytus lebasi.

Neoclytus lebasii, Chevrolat, Ann. Soc. Ent. Fr. 1861, p. 381 [1] (nec Bates, olim).

Hab. PANAMA, Bugaba, Taboga Island (*Champion*).—SOUTH AMERICA, Colombia [1], Venezuela [1].

Neoclytus (?) distortus (p. 58).

There is an example (25 millim. long) of this magnificent species in the Sallé collection with the locality "Mexico" attached. The species can scarcely remain in the genus *Neoclytus*, as the thorax, instead of having a central longitudinal crest, is broadly flattened on the disc and its sides are strongly rounded. The hind thighs also are not clavate, though elongated (extending beyond the apex of the body) and bidentated at the tip. The prosternum is very narrow between the coxæ. In most of these characters the following species agrees with it.

10. Neoclytus (?) championi. (Tab. XXI. fig. 8.)

Multo minor, niger; antennis versus apicem, femoribus tibiisque basi piceo-rufis, scutello cinereo; elytris macula utrinque basali et fasciis angustis valde angulatim-flexuosis quinque ochraceis, suturaque a fascia 1ª usque fasciam 3ᵐ anguste ochraceis, fascia 4ª apud suturam dilatata versus marginem sicut fascia 5ª evanescenti; corpore subtus nigro nitido, lateribus argenteo-maculato; capite antice brevissimo; antennis (♂) quam corpus haud brevioribus, articulis 3º–11ᵐ (4º paullo breviori excepto) æqualibus, apice breviter setosis; thorace ovato disco planato; elytris postice parum angustatis, apice obtuse rotundatis, disco haud carinatis; prosterno inter coxas angustissimo; femoribus posticis quam corpus vix longioribus, parum incrassatis apice bidentatis.

Long. 6 lin. ♂.

Hab. GUATEMALA, Totonicapam 10,000 feet (*Champion*).

One example. Captured in the pine-forest region of "Los Altos."

11. Neoclytus caprea.

Clytus caprea, Say, Journ. Ac. Phil. iii. p. 424; American Entom. iii. p. 53; Leconte, Complete Writings of Thomas Say, i. p. 120, t. 53. f. 2 [1]; Journ. Ac. Phil. ser. 2, ii. p. 26.

Clytus elevatus, Lap. et Gory, Monogr. Clyt. p. 32, t. 7. fig. 40 [2].

Clytus gibbicollis, id. ibid. p. 24, t. 6. f. 28 [3].

Hab. NORTH AMERICA [1 2 3].—MEXICO, Northern Sonora (*Morrison*).

12. Neoclytus purus. (Tab. XXI. fig. 9.)

Angustus subcylindricus, niger; thorace margine postico elytrisque fasciis angustis quatuor (1ª basali, 2ª ante medium fere recta, 3ª mox pone medium antrorsum versus suturam obliquata, 4ª paullo latiori et vix obliqua ante apicem) pallide flavis; thorace elongato-oblongo, asperato, linea dorsali acute tuberculato; elytris apice oblique et obtusissime truncatis; subtus niger nitidus, mesosterno, metasterno segmentisque 1º–2ᵐ ventralibus albo-fasciatis; femoribus posticis elongato-clavatis, tibiis arcuatis dilatato-compressis.

Long. 4–6 lin.

Hab. MEXICO, Actopan (*Höge*); GUATEMALA, San Joaquin in Vera Paz (*Champion*).

An elongate, sublinear species, with neatly defined slender whitish fasciæ. The muzzle is short and broad, the eyes not prominent, and the thorax nearly cylindrical.

13. **Neoclytus** ——?

Hab. Mexico, Ventanas (*Forrer*).

A single example of a species apparently distinct from all the foregoing, but in too imperfect a condition to be satisfactorily determined.

TILLOCLYTUS.

Tillomorpha, Chevrolat (p. 59), nec Blanchard.

Gen. *Cyrtophoro* affinis et similis, sed differt oculis rotundatis, vel intus perparum sinuatis, femoribus valde clavatis, tarsorumque posticorum articulo 1° elongato, quam 2^{us}–3^{m} conjuncti multo longiori.

Resembles *Cyrtophorus*, especially *C. hieroglyphicus* and *C. verrucosus*, in facies and some of its characters, but belongs to the *Tillomorphinæ* group in its sternal structure, the intermediate haunch-sockets being closed by the prolongation of the side processes of the mesosternum. The eyes in some of the species are perfectly round and distant from the base of the antennæ, and in others have a slight sinuation on their inner edges; in the allied genera, *Tillomorpha* and *Euderces*, at least in the typical species, they are reniform, with the upper lobe more or less attenuated. In some species the third and fourth antennal joints have a very small rudimentary apical spine, but others are without traces of it. The elytra, as in *Cyrtophorus*, have a steep rounded posterior declivity; they have towards the base an oblique elevation, which is followed, in the typical species, by a smooth depression, and the apex is rounded. The antennæ are nearly as long as the body, filiform.

1. Tilloclytus balteatus.

Tillomorpha balteata (p. 59).

The type specimen is ticketed "Cordova" (*Sallé*). *T. balteatus* differs from the other two species in wanting the smooth oblique line immediately behind the basal crest of the elytra.

2. Tilloclytus hæmatocephalus.

Tillomorpha hæmatocephala (p. 59).

To the locality given, add:—Mexico, Orizaba (*Sallé*), Oaxaca (*Hegewitsch in coll. Bates*).

In the type, from Orizaba, the middle part of the elytra (extending towards the base) is blackish brown, on which is a pale belt (along the depressed line behind the basal elevation), and a pale triangular spot on the suture; in the Oaxaca specimen the central part is tawny red, the margins of the pale belt and the apical cinereous spot only being dusky.

3. **Tilloclytus clavipes.** (Tab. XXI. fig. 11.)

Elongatus, niger velutinus, griseo-setosus; elytris vittis angustis duabus obliquis ante medium, tertiaque latiori, recta ante apicem, cinereo-griseis; antennis pedibusque fusco-rufis, his apice femorumque clavis nigris; thorace oblongo-ovato, basi angustato; elytris relative elongatis, sat procul a basi oblique carinatis, pone carinam fascia obliqua nitida, spatio apicali post fasciam cineream subnitido; apice obtusissime oblique truncatis; antennis articulis 3°–5^{m} gracilibus inermibus, subæqualibus; tarsis posticis articulo basali quam cæteri 3 conjunctim longiori; corpore subtus albo-maculato.

Long. 4½ lin. ♀.

Hab. GUATEMALA, Quiche Mountains 9000 feet (*Champion*).

The single example has a horseshoe-shaped depression on the disc of the thorax, which may be accidental.

PEMPTEURYS (to precede the genus *Euderces*, p. 59).

Gen. *Tilloclyto* et *Diphyramæ* affinis. Corpus angustum subcylindricum. Oculi subrotundati, intus sinuati, lobo superiori brevissimo. Antennæ corpore ♂ longiores, ♀ dimidio fere breviores; filiformes, articulo 4° brevi quam 2^{m} duplo longiori, 5° elongato versus apicem gradatim incrassato, 1°–5^{m} longe ciliatis. Thorax elongato-ovatus, basi subito depressa et angustata. Elytra relative elongata, prope basin carina obliqua postice linea glabra marginata; prope apicem citius declivia, apice obtusissime oblique truncata. Femora valde clavata; tibiæ posticæ angustæ, tarsis posticis elongatis, articulo 1° quam cæteri conjuncti longiori.

1. **Pempteurys sericans.** (Tab. XXI. fig. 12, ♂.)

Niger, pube argenteo-griseo sericinitenti vestitus; elytris vittis quatuor nigris, 1^{a} subbasali obliqua, 2^{a} mediana subrecta apud suturam antice salienti-angulata, 3^{a} et 4^{a} post medium rectis indistinctis, spatio inter 2^{am} et 3^{am} certo situ nigro-sericeo; antennis et pedibus fusco-rufis.

Long. 4½ lin. ♂ ♀.

Hab. GUATEMALA Cerro Zunil, Cubilguitz in Vera Paz (*Champion*).

EUDERCES (p. 59).

2. **Euderces lævicauda.**

E. pini affinis et subsimilis, sed multo minor. Supra niger; capite, antennis basi elytrisque basi late et sutura usque ultra medium fulvo-rufis, his medio fascia curvata a margine usque ad discum eburnea; fronte brevi strigulosa; thorace ovato, basi mediocriter depresso, dorso acute longitudinaliter striato; elytris basi haud elevatis, postice paullo dilatatis, dimidio basali crebre punctulatis, apicali lævi plagaque magna griseo-pubescenti; pedibus castaneo-rufis, femoribus basi tarsisque pallidis; antennis articulo 3° inermi quam 4^{us} plusquam duplo longiori.

Long. 2¼ lin.

Hab. GUATEMALA, San Gerónimo (*Champion*).

3. **Euderces cribratus.**

Præcedenti affinis. Niger; antennis basi pedibusque fusco-rufis, elytris gutta (haud procul a scutello et prope suturam) semifasciaque curvata apud medium, eburneis; fronte brevissima; thorace ovato, postice gradatim et sat valde angustato, dorso vix convexo confertim striato; elytris basi haud elevatis, dimidio basali foveolato-punctatis, apice (paullo dilatatis) lævibus griseo-pubescentibus; antennis articulo 3° inermi, quam 4^{us} duplo longiori.

Long. 2 lin.

Hab. GUATEMALA, San Joaquin (*Champion*). One example.

4. **Euderces acutipennis.** (Tab. XXI. fig. 15.)

Minutus, niger; elytris longe ante medium semifascia tenui eburnea; fronte brevissima vix ultra oculos prolongata, lata convexa rugulosa; antennis versus apicem incrassatis, articulo 3° inermi quam 4^us^ dimidio longiori; thorace cyathiformi, brevi, antice rotundato-dilatato, postice gradatim valde angustato, basi valde depresso, convexo, striato; elytris utrinque tuberculo ovato centro-basali rugoso, medio dorso depresso, postice paullo dilatato, apice utrinque prolongato et valde acuminato; parte basali subtiliter reticulato-punctata, apicali lævi argenteo-sericea.

Long. $1\frac{1}{2}$ lin.

Hab. GUATEMALA, Panajachel 5000 feet (*Champion*).

One example only of this small species, remarkable for the prolonged and pointed apices of the elytra, and for the form of the thorax, the latter resembling a cup in which the broadish head is sunk up to the eyes. As in most of the smaller species of *Euderces*, the reduced and detached upper lobe of the eyes, if it exists, is so attenuated as not to be distinguishable.

APILOCERA (p. 60).

Apilocera spinicornis (p. 60).

To the Mexican locality given, add:—Jalapa (*Höge*).

Taken by Herr Höge in great abundance at Jalapa. The following species, which rests on a single example taken by the same traveller at a different locality, is very closely allied:—

3. **Apilocera högei.**

Paullo angustior et longior; nigra sat dense griseo-pubescens, fronte (infra oculos) scapoque testaceo-rufis; elytris fascia mediana aurantiaca semifasciaque angusta eburnea, cristis centro-basalibus (minus elevatis et brevioribus), epipleuris (versus basin) fasciaque (post fasciam aurantiacam) nigris nitidis; pedibus (femoribus basi exceptis) nigris.

Long. $3\frac{1}{4}$ lin.

Hab. MEXICO, Cerro de Plumas (*Höge*).

4. **Apilocera magna.** (Tab. XXI. fig. 13.)

A. boucardi similis, sed major, thorace multo longiori et aliter formato etc. Valde elongata, nigra; elytris apud medium fascia angusta eburnea suturam fere attingente; capite infra oculos sat prolongato, fronte rugosa; oculis divisis; antennis versus apicem paullo incrassatis, articulo 3° apice spina validissima, 4° et 5° spinis brevibus, armatis; thorace valde elongato, angusto, antice paullulum, postice valde, depresso, parte mediana anguste ovato, convexo, punctulato, griseo-pubescenti; elytris carinis centro-basalibus maxime elevatis, margine et humeris quoque elevatis politis, interspatiis usque medium valde depressis griseo-pubescentibus, post fasciam eburneam fascia nigra velutina et pone hanc fasciis duabus glabris, cætero spatio apicali griseo-pubescenti; pronoto antice et ad latera concavo; corpore subtus nitido medio argenteo-sericeo.

Long. 6 lin.

Hab. GUATEMALA, Purula in Vera Paz (*Champion*).

Two examples; these were captured in the virgin forest running on the bark of a fallen tree in company with a large ant (*Ponera*), which they very greatly resembled.

5. **Apilocera sculpticollis.**

Cylindrica, nigra vel rufa, griseo-pubescens; antennis et pedibus interdum rufo-testaceis; elytris paullo ante medium fascia tenui eburnea suturam fere attingente; capite confluenter punctato; thorace elongato-ovato, apice et basi fere æqualiter depresso, ante medium rotundato-dilatato, postice gradatim angustato, parte mediana mediocriter convexo, confluenter longitudinaliter striato; elytris medio depressis, postice convexis et paullo dilatatis; carinis centro-basalibus valde elevatis subhamatis, carinis, vitta marginali (prope humeros) fasciaque late mediana (medio fasciola grisea interrupta) glabris; antennis articulo 3° valde elongato, 4° brevi et breviter spinoso.

Long. $2\frac{1}{2}$–3 lin.

Hab. GUATEMALA, Cerro Zunil, Las Mercedes, El Tumbador (*Champion*).

Taken not uncommonly on the margins of the coffee-plantations by beating bushes.

6. **Apilocera reticulata.**

A. sculpticolli individuis rufis simillima, sed differt thorace reticulato-punctato, antennisque articulo 4° inermi.

Long. $2\frac{1}{2}$ lin.

Hab. GUATEMALA, San Joaquin (*Champion*).

One example. Agrees with *A. sculpticollis* in form, except that the elytra are perceptibly less elongated and less dilated behind. In colours it is similar to the red variety of that species; but it differs very greatly in the sculpture of the thorax, which is alveolate-punctate, the punctures shallow, and their narrow interstices forming a reticulated pattern.

7. **Apilocera cleriformis.**

Subcylindrica, nigra; thorace fasciis elytrisque macula magna apicali dense argenteo-pubescentibus, his ante medium semifascia eburnea; antennis et pedibus fusco-rufis; fronte sat elongata plana scabroso-punctata; thorace anguste elongato-ovato, postice gradatim angustato et mediocriter depresso (prope apicem haud depresso), dorso subtiliter longitudinaliter striato; elytris basi et medio depressis, postice sat valde convexis, declivitate apicali abrupta, apice conjunctim rotundatis, carinis centro-basalibus compresso-conicis, mediocriter elevatis nec subhamatis, dimidio basali sparsim punctatis, nitidis, areis depressis tenuiter argenteo-sericeis; antennis articulo 3° quam 4^{us} duplo longiori, 4° inermi.

Long. $2\frac{3}{4}$–3 lin.

Hab. PANAMA, Bugaba (*Champion*).

8. **Apilocera cribellata.**

Nigra, nitida fere glabra; elytris semifascia mediana eburnea; fronte brevi et lata, irregulariter reticulato-punctata; thorace elongato-ovato, versus basin valde angustato et depresso (antice haud depresso), dorso passim ruguloso-punctato (rugulis brevibus punctis interruptis et intermixtis); elytris dimidio basali alveolato-punctatis, apicali lævibus, macula suturali argenteo-sericea, carinis centro-basalibus obtusis mediocriter elevatis; antennis articulo 3° spina elongata, apice paullo incrassata, 4° inermi.

Long. 2–$2\frac{3}{4}$ lin.

Hab. PANAMA, Volcan de Chiriqui (*Champion*).

Two examples.

9. **Apilocera rubella.** (Tab. XXI. fig. 14.)

Cylindrica, fulvo-rufa; elytris tertio apicali argenteo-sericeis, antice fascia fusca glabra marginata, semifasciaque versus basin tenui eburnea; fronte sat magna plana; thorace minus elongato, versus basin angustato et depresso, punctulato; elytris apice sat abrupte declivibus, medio haud depressis, carinis centro-basalibus nullis; pedibus fusco-rufis; antennis rufis, apice subincrassatis fuscescentibus, articulo 3° elongato, apice spina tenui minus elongata, 4° spina brevissima.

Long. $2\frac{1}{4}$ lin.

Hab. GUATEMALA, Volcan de Atitlan (*Champion*).

One example only. Beaten from bushes, in company with ants, which it closely resembles, in scrubby woods near the Lake of Atitlan.

CLEOZONA (p. 60).

Cleozona pulchra (p. 60).

Var. *C. rufipes*. Paullo gracilior, fasciis elytrorum eburneis dimidio distantioribus; pedibus vel toto, vel 4 posterioribus et femoribus anticis, vel 4 posterioribus solum, rufis.

Long. 5–$6\frac{1}{2}$ lin.

Hab. MEXICO, Ventanas (*Forrer*), Tehuantepec (*Sumichrast*).

The Ventanas form is decidedly more slender than the Chontales type, and has all the legs red; the Tehuantepec form is nearer the type in shape, and has the four hind legs red, the anterior pair either black or black with red femora. From all the varieties the form *rufipes* is distinguished by the broader and richer red central belt of the elytra, with the ivory-like narrow fasciæ much more distant from each other.

DIPHYRAMA (p. 60).

Diphyrama singularis (p. 60).

To the locality given, add:—PANAMA, Volcan de Chiriqui 2500 to 4000 feet (*Champion*).

APHYSOTES (to follow the genus *Diphyrama*, p. 60).

Inter gen. *Diphyrama* et *Ozodem* medium tenet. Corpus sublineare, depressum. Frons lata et brevis, epistomate retuso. Oculi magni, fere divisi, lobis distantibus. Antennæ filiformes, tenues, dimidio basali sparsim longe ciliatæ; ♂ corpore vix longiores, articulis 4°–11^{m} æqualibus, 3° haud incrassato quam 4^{us} dimidio longiori, gracili, supra leviter vix perspicue sulcato; ♀ corpore fere dimidio breviores, articulis 7°–11^{m} multo abbreviatis. Thorax elongato-ovatus, antice minus postice valde sulcato-constrictus, parte mediana vix inæquali, antice tuberculis duobus rotundatis. Scutellum quadratum. Elytra plana, corpore breviora, versus apicem absque epipleuris, apice rotundata. Pedes mediocres; femora sat valde clavata, posticis quam corpus paullo brevioribus, tibiis subdilatatis longe hirsutis.

In facies and markings the only species resembles *Diphyrama* and *Epropetes*; in structure, however, it is nearer *Ozodes*, from which it differs in the form and sculpture of the antennæ in both sexes, and less strongly in the form of the thorax.

1. **Aphysotes tubericollis.** (Tab. XXI. fig. 16.)

Niger (immaturo fulvo), argenteo-griseo pubescens ; antennis articulis 5°–6ᵐ testaceis (in individuis fulvis totis fulvo-testaceis, articulis apice fuscis) ; elytris fascia obliqua prope basin (retrorsum ab humero ad suturam), alteraque lata fere recta post medium, nigro-sericeis ; thoracis tuberculis nigro-nitidis, femoribus basi albo-testaceis.

Long. $2\frac{1}{4}$–$5\frac{1}{2}$ lin. ♂ ♀.

Hab. PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

Taken in company with *Diphyrama singularis*, by beating the withered but still-attached leaves of fallen trees in fresh forest-clearings.

LISTROPTERA (p. 61).

Listroptera aterrima (p. 61).

To the localities given, add :—MEXICO, Orizaba (*Sallé*) ; GUATEMALA, Yzabal (*Sallé*), Chacoj (*Champion*) ; PANAMA, Bugaba (*Champion*).

Not uncommon in the coast region of Chiriqui, about freshly cut timber in new clearings (*Champion*).

DIHAMMOPHORA (p. 61).

Dihammophora dispar (p. 61).

To the locality given, add :—MEXICO, Puebla, Cordova, Toxpam (*Sallé*), Oaxaca (*Höge*).

4. **Dihammophora hispida.**

D. dispari affinis et similis, sed magis elongata, semper toto atra, elytrisque apice singulatim explanato-productis valde denticulatis ; linearis, atra, subtus argenteo-cinereo pubescens ; thorace valde elongato, antice angustato, confertissime sat grosse punctato, tuberculo valido utrinque prope basin ; elytris apice utrinque breviter explanato-productis, et acute denticulatis, confertissime subreticulatim (nec striato-) punctatis, dorso utrinque costula conspicua alteraque submarginali, epipleuris angustis verticalibus ; antennis 10-articulatis.

Long. 3–4 lin.

Hab. MEXICO, Etla (*Sallé*), Oaxaca (*Höge*).

EUCHARASSUS (to precede the genus *Rhopalophora*, p. 61).

Gen. *Lissozodi* (Bates) affinis, quoad formam similis ; sed differt antennis glabris (ciliis sparsus versus basin exceptis) articulo 3° profunde sulcato, articulis 4° et sequentibus leviter compressis et bisulcatis. Corpus elongatum, supra planatum sparse setosum. Caput latum, exsertum ; fronte late concava, genis infra oculos prolongatis subacutis. Palpi breves, cylindrici. Tubera antennifera supra elevata spinosa. Antennæ ♂ corpore fere duplo longiores, ♀ corpore vix longiores ; filiformes, glabræ, infra sparsim ciliatæ, articulis 3°–6ᵐ elongatis, æqualibus, 3° uni-, 4° et sequentibus bi-sulcatis subcompressis. Thorax fere sicut in gen. *Ozode* antice et postice profunde sulcato-constrictus, parte mediana paullo inæquali. Scutellum quadratum. Elytra corporis apicem attingentia, apice oblique obtusissime truncata ; marginibus post medium longe sinuatis ibique (usque ad apicem) epipleuris nullis. Pedes sparsim setosi ; femora 4 antica valde, 2 postica gradatim et mediocriter, clavata. Coxæ anticæ cylindroideæ, exsertæ ; prosterno inter coxas angustissimo ; coxæ intermediæ globosæ subexsertæ, mesosterno angusto ; coxæ posteriores sat distantes.

Of described genera of Cerambycidæ this genus comes nearest to *Lissozodes*; but it is also closely allied to *Ozodes* and to *Sthelenus*, which last is placed by Lacordaire in the neighbourhood of the Molorchides, a widely different group. In *Lissozodes* the anterior haunches are salient, but not to the extent reached in *Eucharassus*. The antennæ in all the genera, and in others still undescribed belonging to the same group, are similar in length and form, and in the proportions of the joints; but *Eucharassus* is distinguished for the remarkable clean-cut groove from the base to the apex of the third joint and the double groove (one on each of the compressed sides) of the fourth and following joints. The antennæ and legs are not clothed with long and abundant hairs, as in *Lissozodes* and *Ozodes*.

1. **Eucharassus dispar.** (Tab. XXI. fig. 18, ♂.)

♂. Fusco-niger, thorace vitta mediana irregulari (medio interdum interrupta) scutelloque rufis; elytris pallidius fuscis, humeris et vittis utrinque duabus abbreviatis nigris, 1ª a basi usque prope medium, 2ª ab humeris usque prope apicem; mesosterni epimeris, metasterno et abdomine rufis; thorace longiori, disco utrinque confertim asperato-punctato subcalloso, subtus et lateribus confertissime rugoso-punctato.

♀. Caput, antennæ et pedes nigri; elytris sicut in ♂, thorace toto, scutello corporeque subtus (capite solum excepto) rufis; thorace multo breviori, subtilius ruguloso-punctulato, tuberculato, subtus fere lævi nitido.

Long. 5–8 lin. ♂ ♀.

Hab. Panama, Volcan de Chiriqui (*Champion, Trötsch*).

Same habits as *Aphysotes*.

RHOPALOPHORA (p. 61).

Rhopalophora cupricollis (p. 62).

To the localities given, add:—Mexico, Ventanas (*Forrer*), Cordova (*Sallé, Höge*), Cerro de Plumas, Merida in Yucatan (*Höge*), Chiapas (*Sallé*).

In the great majority of the specimens the thorax is red beneath; this is not therefore a distinctive character of *R. rubecula*; the latter differs from *R. cupricollis* more constantly in having a rather broad black dorsal vitta on the thorax. In *R. cupricollis* the surface of the thorax varies in being spotless, having a central dusky spot, a short dark line, or a continuous narrow dorsal line. The last mentioned approaches extremely near *R. rubecula*.

Rhopalophora lineicollis (p. 62).

To the locality given, add:—Mexico, Ventanas (*Forrer*), Cordova (*Sallé*), Almolonga (*Höge*).

3 (a). **Rhopalophora longipes.**

Stenocorus longipes, Say, Journ. Ac. Phil. iii. (1824) p. 426[1]; Leconte, Complete Writings of Thomas Say, ii. p. 201.

Tinopus longipes, Leconte, Journ. Ac. Phil. ser. 2, p. 19.

Rhopalophora longipes, Leconte, Proc. Ac. Phil. vii. p. 218.
Rhopalophora porosa, White, Cat. Long. Col. Brit. Mus. ii. p. 206[2].

Hab. North America[1 2].—Mexico, Hacienda de San Miguelito (*Dr. Palmer*).

A single female example, in bad condition, sent by Dr. Palmer.

Rhopalophora miniatocollis (p. 62).

To the locality given, add:—Mexico, Puebla (*Sallé*), Ventanas (*Forrer*), Oaxaca (*Höge*).

The specimen in the Sallé collection is a variety in which the underside of the prothorax is black clothed with ashy pile, and the anterior and posterior margins above are also rather broadly black. All the other examples are red above and beneath, and marked with longitudinal grey streaks. In the female, in this and the allied species, the thorax is shorter and relatively broader than in the male.

Rhopalophora tenuis (p. 62).

This species is doubtful. It was described from what appeared to be a single example in Count Mniszech's collection. It is possibly only the female of *R. miniatocollis*, in which the grey pubescent lines of the thorax are abraded. A specimen nearly agreeing with the description is among the Oaxaca series of *R. miniatocollis* taken by Herr Höge. In the Sallé collection specimens of the following are labelled *R. tenuis*, Chevr., which must be wrong, as *R. tenuis* is described as having the thorax red above and beneath.

Rhopalophora incrustata (p. 62).

To the Mexican localities given, add:—Puebla, Yolos, Juquila, Durasnal (*Sallé*), Guanajuato (*Dugès in coll. Sallé*), Paso del Macho (*Höge*).

Rhopalophora versicolor (p. 63).

To the locality given, add:—Panama (*Boucard*), Bugaba (*Champion*).

On flowers in open places (*Champion*).

8 (a). Rhopalophora nigriventris.

R. versicolori similis, sed differt statura multo graciliori, ventre, pectore elytrisque nigris. Elongata, angusta, nigra; elytris fusco-nigris, opacis, alutaceis et passim conspicue punctatis, margine laterali a basi usque ultra medium paullo elevato epipleurisque verticalibus, apice breviter oblique truncatis; capite (antice nigro excepto), thorace supra et subtus coxisque 4 anticis aurantiaco-rufis; thorace angusto post medium dilatato-rotundato, supra inæquali, tuberoso, opaco, lævi; pedibus valde elongatis nec serratis; ventre, meso- et metasternis nigris, perparum griseo-pubescentibus.

Long. 6 lin. ♂.

Hab. Guatemala, Purula (*Champion*). One example.

COSMISOMA (p. 63).

Cosmisoma martyra (p. 63).

To the localities given, add:—PANAMA, Volcan de Chiriqui (*Champion*).

Cosmisoma plumicornis (p. 63).

To the localities given, add:—PANAMA (*Boucard*).

4. **Cosmisoma reticulatum.**

Parva, thorace relative valde elongato; nigra subopaca, capite confertim intricato-punctato; thorace elongato cylindrico (medio paullulum dilatato), basi leviter sulcato-constricto, apice vix depresso, marginibus anticis et posticis exceptis eleganter alveolato-punctato; elytris brevibus planatis, confertissime confluenter ocellato-punctatis; femoribus crasse clavatis; antennis (♀) articulis 3°–5^{m} longissimis sparsius ciliatis, 5° apice nigro-penicillato, 6°–11^{m} brevissimis.

Long. 4½ lin. ♀.

Hab. MEXICO, Zacatepec (*Sallé*).

OZODES (p. 63).

The Central-American species are similar in habit to *Diphyrama*, and found by beating withered leaves of fallen trees in the forest-clearings.

Ozodes multituberculatus (p. 64).

To the locality given, add:—PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

Ozodes xanthophasma (p. 64).

To the locality given, add:—PANAMA, Volcan de Chiriqui, Bugaba, Tolé (*Champion*).

ORNITHIA (p. 64).

Ornithia chevrolati (p. 64).

To the localities given, add:—MEXICO, Cerro de Plumas (*Höge*), Cordova (*Sallé*); GUATEMALA, Panzos, Teleman, La Tinta, Sinanja (*Champion*); PANAMA (*Boucard*), Bugaba (*Champion*).

A widely distributed species in Central America, inhabiting the "tierra caliente" of both the Atlantic and Pacific slopes (*Champion*).

ZENOCHLORIS (to follow the genus *Chrysoprasis*, p. 65).

Gen. *Chrysoprasei* similis, sed maxime differt antennis serratis, acetabulis intermediis extus apertis etc. Corpus parum elongatum, glabrum, dense sculpturatum. Caput antice elongatum, subverticale. Palpi subcylindrici. Tubera antennifera rotundata, distantia. Antennæ (♀?) corpore paullo breviores, robustæ; scapo brevi, cylindrico-arcuato, articulo 2° brevissimo nodoso, 3°–11^{m} subæqualibus, compressis, 3°–10^{m} extus apice productis. Thorax mediocriter elongatus subcylindricus, lateribus medio obtuse angulatis. Elytra basi thorace multo latiora, oblonga, apice obtuse rotundata, margine laterali medio longe sinuato. Pedes robusti, parce setosi; femora gradatim parum incrassata, postica corpore longiora, apice bispinosa; tibiæ lineares; tarsi postici sicut in *Chrysoprasi* elongati. Coxæ anticæ vix exsertæ, extus angulatæ, proster-

num inter coxas haud depressum, apice verticale. Mesosternum sat latum, simplex; acetabula intermedia extus anguste aperta. Metathoracis episterna oblonga, prope apicem angustata.

A genus which fits into none of the numerous groups constituted by Lacordaire. The unique species resembles a robust *Chrysoprasis*, in the neighbourhood of which genus it may be provisionally placed; but the structural characters are partly those of *Desmocerus*.

1. **Zenochloris paradoxa.** (Tab. XXI. fig. 19.)

Viridi-metallica, abdomine rufo; capite confertim punctato-rugoso; thorace dense transversim confluenter striato; elytris confertissime subconfluenter punctatis; pectore minutissime punctato, punctis majoribus intermixtis; abdomine sublævi.

Long. 7½ lin.

Hab. PANAMA, Bugaba (*Champion*).

One example, taken in the virgin forest.

STENOSPHENUS (p. 65).

Stenosphenus amabilis (p. 65).

To the locality given, add:—MEXICO, Ventanas (*Forrer*).

Stenosphenus sobrius (p. 66).

To the Mexican locality given, add:—Yolotepec, Parada (*Sallé*), Oaxaca (*Höge*).

Smaller and narrower examples occur in Mexico which nearly bridge over the difference between this species and *S. subtilis*. In the uniform fine punctuation of the elytra, and in colours, the two species agree; but *S. sobrius* differs in the elytra in both sexes being narrowed in curved lines towards the apex, *S. subtilis* being attenuated almost in straight lines and having a distinctly narrower apex. The femora in *S. sobrius* are often dusky towards the apex, but they are sometimes entirely red, as in *S. subtilis*.

Stenosphenus cribripennis (p. 66).

To the Mexican localities given, add:—Cuernavaca, Izucar, Yolos, Etla (*Sallé*), Pinos Altos in Chihuahua (*Buchan-Hepburn*), Ventanas (*Forrer*), Almolonga, Oaxaca (*Höge*).

Sometimes found in vast profusion in Guatemala on flowers of Mimosæ, Compositæ, &c. in open places in the dry season (*Champion*).

Stenosphenus rufipes (p. 66).

To the locality given, add:—GUATEMALA, Paraiso (*Champion*).

Stenosphenus trispinosus (p. 66).

To the localities given, add:—MEXICO, Oaxaca (*Höge*).

Stenosphenus suturalis (p. 67).

Mexican specimens of this species in the Sallé collection are labelled as from Izucar.

Stenosphenus ochraceus (p. 67).

To the locality given, add:—MEXICO, Ventanas (*Forrer*); GUATEMALA, San Gerónimo, Paraiso, El Reposo (*Champion*).

Found plentifully on new fences at Paraiso, in the low country of the Guatemalan Pacific slope (*Champion*).

12. **Stenosphenus erythroderus.**

S. trispinoso proxime affinis; differt thorace supra et subtus sanguineo, pedibus nigris. Gracilis, niger, thorace sanguineo; capite angusto, cum scapo grosse punctato; thorace angusto, antice attenuato, subtiliter sparsim punctato; elytris postice subrecte attenuatis, apice utrinque trispinosis, punctulatis, seriatim griseo-setosis, striis utrinque discoidalibus fortius punctatis, costa lata prope suturam parum elevata.

Long. $4\frac{1}{2}$–$5\frac{1}{2}$ lin.

Hab. MEXICO, Vera Cruz (*Sallé*), Oaxaca (*Höge*).

Named *S. erythroderus*, Chevr. (MS.), in the Sallé collection.

13. **Stenosphenus lineatus.**

S. lugenti (Leconte) affinis. Sat gracilis, niger, pedibus rufis; tibiis apice tarsisque fuscis; capite antice scapoque subtus interdum rufis; thorace elongato, angusto, antice gradatim attenuato, fere lævi; elytris apice rectius truncatis, angulo suturali breviter, exteriori longe, spinosis, supra utrinque vittis tribus latis confuse punctulatis et griseo-setosis, interstitiis duobus lævibus; antennis ♂ parum longioribus, ♀ vix brevioribus.

Long. $5\frac{1}{2}$–6 lin.

Hab. GUATEMALA, Paraiso (*Champion*).

Differs from *S. lugens* by its red legs; from *S. hirsutipennis* (which also has three long griseo-setose vittæ on the elytra, but a red head and thorax, and black legs) it differs in the form of the thorax (which is much rounded on the sides in *S. hirsutipennis*), and by the shorter antennæ.

14. **Stenosphenus langurioides.**

Gracilis, postice gradatim recte angustatus, niger politus, femoribus castaneo-rufis; thorace angusto, antice gradatim attenuato, disco utrinque sparsissime punctato; elytris elongatis rectilateris, apice late suboblique truncatis, angulo exteriori longe, suturali breviter, spinosis, supra utrinque prope suturam vittis duabus punctulatis et griseo-setosis, interstitio nigro, angustissimo, postice abbreviato, lateribus late nigropolitis, sparse punctulatis; corporis subtus lateribus argenteo-tomentosis; antennis ♂ quam corpus dimidio longioribus, articulo 3° sulcato.

♂. Prothorace subtus utrinque areis duabus depressis, grosse et crebre punctatis.

Long. $6\frac{1}{2}$ lin. ♂.

Hab. GUATEMALA, El Reposo (*Champion*).

AGALLISSUS (p. 67)

Agallissus melaniodes (p. 67).

Var. *Agallissus quadrimaculatus* (p. 68).

In the Sallé collection is a male example of this species (named *A. quadrimaculatus*, White), intermediate in the elytral markings between the var. *trifasciatus* and the true *A. quadrimaculatus*, White. It differs from the latter only in having a red apical spot as in the var. *trifasciatus*, from which it differs, on the other hand, in the median and subapical fasciæ not reaching the suture, the median especially being far distant; the antennæ are a little longer than in the female, reaching to beyond the middle of the elytra; the latter are rather more narrowed behind than in the female.

Agallissus clytoides (p. 68).

Agallissus gratus (p. 68) [1].

Aplectrus lepturoides, Chevrolat in d'Orbigny, Dict. Univ. d'Hist. Nat. ii. p. 12.

♂. A femina differt forma multo angustiori, elytris postice valde angustatis, antennis medium elytrorum attingentibus.

Long. 7–10 lin. ♂ ♀.

To the locality given, add:—NORTH AMERICA, Texas [1].—MEXICO, Northern Mexico [1], Oaxaca (*Sallé*), San Carlos (*Flohr*).

Varies a little in the number and size of the yellow spots of the elytra, but the vittiform basal spot seems to be constant. In the varieties the middle and postmedian spots are more or less reduced (the middle one sometimes almost obsolete), and the antemedian lateral spot disappears, as well as the lateral lobe of the postmedian spot.

ANCYLOCERA (p. 68).

Ancylocera macrotela (p. 68).

To the localities given, add:—MEXICO, Puebla (*Sallé*).

3. **Ancylocera cribricollis.**

A. rugicolli et *sallæi* multo angustior. Linearis, nigra, nitida, setosa; elytris et abdomine sanguineis; capite grossissime confluenter punctato; thorace elongato, angusto, subcylindrico in medio canaliculato, passim grosse et discrete punctato vel foveato; elytris confertim grosse lineatim (versus apicem confuse) punctatis, apice verticaliter declivibus, margine apicali deplanato et sinuato-truncato; femoribus posticis gracilibus, nec clavatis, apice intus longe spinosis; antennis articulis a 3° (♂ ♀) elongato-triangularibus [nec intus productis], compressis, 3° paullo majori, 4°–10^{m} subæqualibus, ♂ articulo 11° elongato acuminato, apice curvato, ♀ articulis 10°–11^{m} fere conglutinatis.

Long. $4\frac{1}{4}$–$4\frac{1}{2}$ lin.

Hab. MEXICO, Almolonga (*Höge*).

Distinguished at once from *A. rugicollis* and *A. sallæi* by the large rounded separate

punctures of the thorax. It is, moreover, a much narrower species, and differs greatly in the structure of the antennæ.

CALLOPISMA (to follow the genus *Ancylocera*, p. 69).

Callopisma, Thomson, Systema Ceramb. p. 212; Lacordaire, Gen. Col. ix. p. 137; Bates, Trans. Ent. Soc. 1870, p. 419.

The following makes the third species described of this genus, very distinct from *Ancylocera*. All are from Tropical America.

1. **Callopisma cribellum.** (Tab. XXI. fig. 21, ♀.)

Sublineare, nigrum; thorace supra et infra coccineo, macula parva medio-basali nigra; corpore supra toto grosse alveolato-punctato; thorace fere orbiculari, sed juxta basin constricto et medio dorso planato; elytris dorso planatis, apice verticaliter declivibus ibique sutura elevata, apud apicem acute producta; tibiis 4 posterioribus apice longe unispinosis.

♀. Antennæ robustæ, articulis 2°–10ᵐ serratis longitudine æqualibus.

Long. $4\frac{2}{3}$ lin. ♀.

Hab. PANAMA, Bugaba (*Champion*).

One example only.

CHAMPIONA (p. 69).

2. **Championa ctenostomoides.** (Tab. XXI. fig. 17.)

C. auratæ similis, sed differt elytris paullo ante medium fasciola abbreviata eburnea. Ænea vel aurato-ænea viridi-nitens, femoribus basi testaceo-rufis; thorace anguste cylindrico, transversim ruguloso; scutello et linea suturali prope scutellum cinereo-tomentosis; elytris apice anguste sinuato-truncatis et utrinque bispinosis, supra confertim punctatis hic illic rugulosis, linea transversa antemediana eburnea; subtus ænea, lateribus cinereo-tomentosis.

Long. $5\frac{1}{4}$–$5\frac{1}{2}$ lin. ♀.

Hab. MEXICO (*Baden, coll. Bates*), Cordova (*Sallé*).

Two examples, undoubtedly females; in both these the antennæ are precisely similar in the form and the relative length of the joints to the male example described of *C. aurata*, but all the joints are shorter. The example given me by Dr. Baden is as brilliant and rich in colouring as *C. aurata*. The Cordova specimen is brassy, without reddish-golden and green reflections.

STENYGRA (p. 69).

Stenygra histrio (p. 70).

To the localities given, add:—MEXICO, Tepansacualco, Orizaba, Cuernavaca (*Sallé*), Almolonga (*Höge*); COSTA RICA (*Van Patten*).

In all the Costa-Rican examples the elytra are black to the apex, and the underside of the body is also black.

PLATYARTHRON (p. 70).

Platyarthron bilineatum (p. 70).

To the locality given, add :—Mexico, Cerro de Plumas (*Höge*), Cordova, Vera Cruz, Tuxtla (*Sallé*).

Platyarthron rectilineum (p. 70).

To the Guatemalan locality given, add :—Volcan de Atitlan, El Tumbador, Las Mercedes (*Champion*).

4. **Platyarthron semivittatum.** (Tab. XXI. fig. 22.)

P. quadrinotato proxime affine; differt solum elytris vittis duabus basalibus fasciaque postmediana recta, angustiori, eburneis. Nigrum, politum; thorace glabro, lineis duabus argenteis; elytris lævibus, vitta basali interiori medias elytras fere attingente, vitta marginali quam in *P. quadrinotato* longiori et angustiori, fascia mediana ad suturam interrupta.

♂. Antennis quam corpus longioribus.

Long. $10\frac{1}{2}$ lin. ♂.

Hab. Panama, Bugaba (*Champion*).

5. **Platyarthron laterale.**

P. quadrinotato affine. Angustius, elongato-subcylindricum, nigrum, politum, fere impunctatum; thorace lineis duabus argenteo-sericeis; elytris vitta brevi utrinque basali (basin haud attingente) vittaque marginali ab humero usque longe ultra medium extensa, lobo versus vittam basalem alteraque triangulari post medium versus suturam, emittente, eburneis.

Long. 8 lin. ♀.

Hab. Nicaragua (*Sallé*).

The single example is discoloured, consequently the ivory-white markings are of a dull tawny hue.

CERAGENIA (p. 71).

Ceragenia leprieuri (p. 71).

Mr. Champion captured many examples of this species at Bugaba, in the low forest-region of Chiriqui; all were taken on the wing.

EVANDER (p. 71).

Evander nietoi (p. 71).

To the locality given, add :—Mexico, Jalapa (*Höge*); Guatemala, Coban (*Champion*).

Found in numbers by Herr Höge.

Evander xanthomelas (p. 72).

To the localities given, add :—Mexico, Izucar, Puebla (*Sallé*), Monclova in Coahuila (*Dr. Palmer*).

PTEROPLATUS (p. 72).

Pteroplatus quadriscopulatus (p. 73).

To the localities given, add:—MEXICO, Cordova (*Sallé*, *Höge*), Jalapa (*Höge*).

Ticketed *P. terminalis*, Dej., in the Sallé collection.

Pteroplatus sellatus (p. 73).

To the localities given, add:—MEXICO, Izucar, Puebla, San Andres Tuxtla (*Sallé*), Cordova, Jalapa (*Höge*); HONDURAS (*Sallé*).

ELYTROLEPTUS (to follow the genus *Pteroplatus*, p. 73).

Pteroplatus, Thomson, Leconte.
Elytroleptus, Dugès, La Naturaleza, iv. p. 184.

Distinguished from *Pteroplatus*, which the species much resemble, by their short antennæ (in the female of the typical species only about one third, in the male more than one half, the length of the body), and by their joints 5–11 being triangular and produced at their inner apices, none of them being penicillated, even in the male. The species described by Dugès are more linear in form than the *Pteroplati*; but this is not a constant difference, other species having dilated elytra, and the facies of *Lycus* similar to the *Pteroplati*. The genus seems to be peculiar to Mexico and the southern United States; *Pteroplatus floridanus*, Leconte, belongs to it.

1. **Elytroleptus octocostatus** (*Pteroplatus octocostatus*, p. 73).

This species has serrated antennæ, with the four basal joints clothed only with short hairs; it belongs, therefore, to *Elytroleptus* rather than to *Pteroplatus*, but it is peculiar in the strong dilatation and fringed margins of the elytra and in the form of the thorax.

2. **Elytroleptus pallidus** (*Pteroplatus pallidus*, p. 73).

Elytroleptus alfredi, Dugès, La Naturaleza, iv. p. 184, t. 6. fig. 9[1].

To the localities given, add:—MEXICO, Guanajuato[1] (*coll. Sallé*), Parada (*Sallé*).

3. **Elytroleptus luteus.**

Elytroleptus luteus, Dugès, La Naturaleza, iv. p. 185, t. 6. fig. 10[1].

Hab. MEXICO, Guanajuato[1] (*Sallé*).

4. **Elytroleptus ignitus.**

Pteroplatus ignitus, Leconte, Trans. Amer. Ent. Soc. xii. Novem. 1884, p. 24[1].

Hab. NORTH AMERICA, Arizona[1].—MEXICO, Northern Sonora (*Morrison*).

5. **Elytroleptus apicalis.**

Pteroplatus apicalis, Leconte, Trans. Amer. Ent. Soc. xii. Novem. 1884, p. 24[1].

Hab. North America, Arizona[1].—Mexico, Northern Sonora (*Morrison*).

6. **Elytroleptus longipennis.**

E. pallido affinis, sed differt elytris (♀) longissimis, ante medium dilatatis (epipleurisque explanatis), post medium usque prope apicem lateribus parallelis, paullo ante apicem sat subito angustatis. Fulvo-ochraceus, antennis nigris; corpore subtus, femoribus basi, tibiis et tarsis, fusco-piceis; thorace relative parvo, area discoidali depresso, grossissime intricato-punctato, marginibus elevatis et lævibus, sericeis; scutello nigro; elytris confertim punctulatis, utrinque tricostatis (costulaque 4ª inter costas 2ᵐ et 3ᵐ).

Long. 7 lin. ♀.

Hab. Mexico (*coll. Bates, ex coll. A. Turner*).

Distinguished from *E. pallidus* and *E. luteus* by the relatively much longer elytra, which commence to widen before the middle, in the manner of many species of Lycidæ.

7. **Elytroleptus eros.** (Tab. XXI. fig. 23.)

Elongatus, depressus, elytris postice gradatim et mediocriter dilatatis. Niger; capite vitta mediana, thorace vittis duabus vel quatuor fulvo-aureo sericeis, elytris fulvescenti-coccineis; thorace sicut in *E. pallido* post medium leviter angulato-dilatato, area discoidali intricato-punctato; elytris confertissime punctulatis, utrinque tricostatis (♀ costulaque quarta obsoleta inter costas 2ᵐ et 3ᵐ).

Long. $5\frac{1}{2}$–7 lin.

Hab. Mexico, Oaxaca (*Sallé*), Misantla, Cerro de Plumas (*Höge*).

8. **Elytroleptus nigripennis.**

Niger, thorace supra aureo-tomentoso, macula discoidali nigra, vertice aureo-vittata; elytris gradatim rotundato-dilatatis, apice acuminatim angustatis, confertissime et confluenter punctulatis, utrinque tricostatis.

Long. $6\frac{1}{2}$ lin.

Hab. Mexico, Oaxaca (*Sallé*).

One example.

CORYNELLUS (to precede the genus *Crioprosopus*, p. 74).

Gen. *Pteroplato* affinis; differt femoribus subito clavatis, etc. Corpus breviter oblongum, postice dilatatum, breviter dense setosum. Palpi articulis terminalibus brevibus, cylindricis. Antennæ corpore multo breviores, articulis 1º–5ᵐ sat dense et longe hirsutis (nec penicillatis), filiformibus, 6º–10ᵐ fere nudis, apice intus leviter productis. Thorax transversus, medio rotundato-dilatatus, antice magis quam postice angustatus. Elytra gradatim mediocriter dilatata, confertim punctata, obsoletissime costulata. Pedes breves; femora omnia abrupte clavata, pedunculata; tarsi postici breves, articulo 1º triangulari quam 2ᵘˢ vix longiori.

A group of small species, allied to *Pteroplatus* and *Elytroleptus*, but having the facies of Galerucidæ rather than that of Lycidæ. In their clavate femora they resemble

the genus *Aphylax*, belonging to the same subgroup of Cerambycidæ, which differs in the conical lateral tubercle of the thorax and the strongly costate elytra. The form of the antennal joints constitutes, next to the clavate femora, its chief character as distinguishing it from *Pteroplatus* and *Elytroleptus*.

1. **Corynellus mimulus.**

Niger, subtus politus, supra opacus; capite (supra et infra), thorace (maculis elongatis nigris tribus exceptis) elytrisque dimidio basali (vittula nigra suturali excepta) fulvescenti-rufis; thorace convexo, æquali, sericeo, sparsim punctulato; elytris confertim discrete punctulatis, utrinque costulis angustis duabus tenuibus minime elevatis, apice conjunctim rotundatis.

Long. $4\frac{1}{4}$ lin.

Hab. Mexico (*Sallé*).

2. **Corynellus ochraceus.** (Tab. XXI. fig. 20.)

Ochraceus; antennis, vertice macula triangulari thoraceque vitta lata, nigris; femoribus apice, tibiis, tarsis ventreque piceo-fuscis; thorace impunctato, sericeo; elytris utrinque costula tenui unica vix perspicua.

Long. $3\frac{1}{2}$ lin.

Hab. Panama, San Feliz (*Champion*).

CRIOPROSOPUS (p. 74).

The remark in the former part of this work that *C. rimosus* differs in essential points from its congeners was founded on the supposition that the great sexual difference it displays in the sculpture of the thorax (densely punctured in the male, sparsely so in the female) was peculiar to it. The subsequent arrival of more abundant material proves that all the typical species of the genus present this sexual character. The type (*C. servillei*) must therefore be a female, the other sex of which remains to be discovered, and the metallic species from Guatemala, which I took to be a female of *C. iridescens*, the male of a distinct species.

The genus, as at present constituted, contains two distinct groups, meriting generic rank, as they differ from each other nearly as much as *Stenaspis* differs from *Crioprosopus*. The typical or first group is characterized as I have above stated; the second group, typified by *C. viridipennis*, is distinguished by the thorax of the male having the sculpture confined to a limited area towards each anterior angle, the thorax in the female being quite smooth. To this group belong *C. viridipennis*, *C. lampros*, *C. rutilans*, and *C. cacicus**.

* **Crioprosopus cacicus.**

C. rutilanti affinis; elytris relative brevioribus apiceque obtusioribus; niger; thorace tuberculo laterali, metasterni macula ventreque, rufis; elytris saturatius cyaneis.

Long. 13 lin. ♂ ♀.

Hab. Colombia.

Crioprosopus nietoi (p. 74).

To the locality MEXICO, add:—Tepansacualco (*Sallé*).

2 (A). **Crioprosopus divisus.**

Castaneo-rufus; elytris flavo-testaceis, utrinque maculis quatuor nigris, viz. 1ª basali, prope scutellum, 2ª (majori) et 3ª (parva) transversim, positis prope medium, 4ªque apicali; thorace transversim ovato, confertissime et confluenter punctulato, lineis brevibus impressis quinque, maculaque discoidali (versus marginem posticum) polita; elytris subtiliter punctulatis, apice flexuoso-truncatis; mesosterno antice oblique declivi. Long. 13 lin. ♂.

Hab. MEXICO, Toxpam (*Sallé*).

One example in the Sallé collection, labelled "*Stenaspis divisus*, Chevr." I think it very likely to be the male of *Crioprosopus nietoi*.

The sides of the thorax are very slightly angulated, a little behind the middle.

Crioprosopus iridescens (p. 74).

The unique male of *C. iridescens*, White, from Guatemala, which I examined at the British Museum, and which has since been carefully compared with specimens of *C. championi* and *C. basileus* by Mr. Champion, appears to belong to a species distinct from both. The thorax is relatively much broader, the lateral tubercle broader and more obtuse, and the antennæ much longer than in *C. basileus*. The fulvous translucence of the brilliantly metallic green elytra mentioned by White appears attributable to immaturity. The mesosternum is nearly plane.

3 (A). **Crioprosopus championi** (*Crioprosopus iridescens*, ♀, p. 74, nec White).

The two specimens from Zapote referred as female to White's species prove to be of the same sex (♂) as White's typical example. They are nearly the same in colours as *C. iridescens* (♂) and *C. basileus* (♂); but *C. championi* (♂) differs from both in the transversely ovate form of the thorax, the sides of which are strongly arcuated, without trace of lateral tubercle or conical protuberance. The antennæ are also much shorter, one fourth shorter than the body; the length is 18 lines.

Crioprosopus basileus (p. 75).

♂. Described on p. 74 erroneously as ♀. The antennæ are of the length of the body.

♀. A ♂ differt thorace sparsim et subtiliter punctulato, fere lævi, lateribus [utrinque macula aurantiaca] corporeque subtus aurantiaco-rufo; prosterno (plus minusve) mesosterno coxisque omnibus, nigris; scutello sicut in ♂ anguste triangulari, elongato.

♀ var. Thorax toto rufus. *C. thoracicus*, White (p. 75).

To the locality given, add:—MEXICO (*coll. Brit. Mus.*), Merida in Yucatan (*Höge*).

Herr Höge took a series of both sexes of this species (including one example of

C. thoracicus, which has been compared with White's type) near Merida. The males do not differ from the Oaxaca specimen described (as above cited) at p. 75, except that the mesosternum has a more distinct conical tubercle.

Crioprosopus tricolor (p. 75).

Mr. Champion has examined the type of Waterhouse's species in the British Museum, which proves to be a female, closely resembling *C. basileus*, ♀, above described, but differing in the much shorter scutellum. The sculpture of the thorax also is different, the disc being punctured equally with the sides (in *C. basileus*, ♀, the disc is smooth), and the surface having shallow scattered impressions. The mesosternum has a distinct conical tubercle, but the antennæ are more slender and shorter.

Probably the female of a species distinct from any of the foregoing. Its locality is supposed to be Venezuela, and it must therefore be erased from our list.

6 (A). **Crioprosopus lampros.**

Crioprosopus tricolor (p. 75), nec Waterhouse.

Clare rufus; capite toto, antennis, thoracis marginibus anticis et posticis (supra et subtus) vittaque lata dorsali, coxis totis, mesosterno, femoribus basi et apice, tibiis et tarsis, nigris; elytris subviridi-cyaneis splendidissimis; thorace convexo, lævissimo, basi depresso, subtilissime et sparsissime punctulato, lateribus pone medium tuberculo lato valido subacuto, ante medium flexuosis; scutello angusto, elongato, acutissimo plano; elytris apice conjunctim rotundatis, extus denticulo armatis, punctulis sparsis vix perspicuis exceptis, lævissimis; corpore subtus nitido, lateribus tenuissime sericeis; mesosterno tuberculo valido, subacuto, porrecto. Antennarum (♀) scapo clavato, lævi, antice longe foveato, quam articuli 3us, 5us, et 6us duplo, quam 4us paullo breviori (cæteri articuli desunt).

Long. 15 lin. ♀.

This species, taken at Obispo on the Isthmus of Panama by Mr. Salvin, was erroneously referred (*antè*, p. 75) to *C. tricolor*, Waterh.

STENASPIS (p. 76).

Stenaspis verticalis (p. 76).

To the localities given, add:—MEXICO, Izucar (*Sallé*), Ventanas (*Forrer*), Bobo (*Höge*), Sonora.

Differs in the degree of closeness of its punctuation and in the colour of the scape, according to locality. Sonora and Ventanas examples have large smooth spaces on the thorax in both sexes, and the scape red, except at the tip. All the Bobo examples are distinguished by the very close confluent or vermiculate punctuation of the elytra, and the rather less dense sculpture of the thorax, and the scape is always black. Captured in great abundance by Herr Höge at Bobo.

Stenaspis solitaria (p. 76).

To the localities given, add:—MEXICO, Ventanas (*Forrer*), Alamos (*Buchan-Hepburn*).

A still greater local variation in sculpture is presented by this species. Ventanas specimens are rendered subopaque by the close and fine vermiculate punctuation of the elytra, the thorax being much more coarsely but also densely punctured. Alamos examples have a nearly smooth thorax.

DELTASPIS (p. 76).

This genus belongs to Leconte's group Tylòses, the mandibles being broad and notched at the apex.

Deltaspis auromarginata (p. 77).

Var. *D. cyanipes*, Klug, MS. Elytris marginibus concoloribus. =*D. auromarginata* (partim), Lacordaire, Gen. Col. ix. p. 172.

To the locality given, add :—MEXICO, San Carlos (*Sallé*).

All the examples I have seen of this species belong to the var. *D. cyanipes* (Klug, MS.), which, according to Lacordaire, is a variety of *D. auromarginata*.

Deltaspis rubriventris (p. 77).

To the locality given, add :—MEXICO, Ventanas (*Forrer*).

Deltaspis nigripennis (p. 77).

? *Muscidora tricolor*, Thomson, Syst. Ceramb. p. 202.

To the locality MEXICO, add :—Almolonga (*Höge*), Alamos (*Buchan-Hepburn*).

♂. Antennis quam corpus fere duplo longioribus, articulis 3°–4ᵐ haud sulcatis.

The thorax is in most examples rounded on the sides, without trace of lateral tubercle, in others it has a lateral tubercle, as described ; it is bright blood-red in colour, with the anterior and posterior margins black. The apex of the elytra varies also in a singular manner, being either obtusely rounded or flexuous-truncate, with the exterior angle dentiform.

As mentioned in the description, the surface is slightly shining, and the elytra bluish black. The punctuation is fine on the elytra, but each puncture is separate from its neighbour; on the thorax the punctures are larger, deep, and circular, and mostly widely spaced.

The species has a close general resemblance to *Batyle ignicollis*, Say, but is well distinguished by its generic characters, the mandibles in *Batyle* being acute and simple at the apex, and the hind femora and tarsi elongated. It agrees very well with Thomson's description of *Muscidora tricolor* except in the important character "frons lateraliter subarmata;" there being no trace of any prominence on the forehead in any of our numerous examples of *D. nigripennis*, I am obliged to infer that Thomson's insect is a species belonging to some genus of this numerous group unknown to me.

5. Deltaspis alutacea.

D. nigripenni simillima; differt elytris vitta laterali ab humero usque ultra medium rufa, minutissime confluenter punctatis et opacis; pectore interdum rufescenti.

Long. 5–8 lin. ♂ ♀.

Hab. Mexico, Izucar (*Sallé*), Ventanas (*Forrer*).

In form and colours similar to *D. nigripennis*, and the thorax varying in the same way with regard to the lateral tubercles being present or not, even in the same sex; but the surface is opaque, owing to the close sculpture which is formed, on the thorax, of shallow round foveæ, and, on the elytra, of minute confluent punctures. The elytra are dull black, with the exception of a red lateral vitta extending from the shoulders to a little beyond the middle, and there tapering to a point. The apex of the elytra also varies nearly in the same way. Some of the Ventanas specimens are intermediate in respect of the punctuation of the elytra between the two species; the two forms approach therefore very nearly the status of geographical varieties.

This species is the analogue of *Batyle meridionalis* (resembling it in colours and to some degree in sculpture), as *D. nigripennis* is that of *Batyle ignicollis*.

6. Deltaspis rubens.

Elongato-oblonga, nigra, dense et longe griseo-pubescens; thorace supra et elytris læte coccineis, illo antice et postice nigro-marginato, his vitta suturali, nigris; capite scapoque grosse confluenter punctatis; antennis ♂ quam corpus duplo longioribus, ♀ quam corpus brevioribus, articulis confertim punctulatis; thorace transverso, medio paullo dilatato et utrinque breviter conico-tuberculato, grosse confluenter punctato, obtuse quinque-calloso; scutello lato triangulari; elytris apice flexuoso-truncatis, confertissime et subconfluenter punctatis.

Long. 7–9 lin. ♂ ♀.

Hab. Mexico (*Sallé*), valley of Mexico (*Flohr*).

Notwithstanding its bright red colour and style of markings, more nearly allied to *Deltaspis* than to the similarly-coloured *Tylosis*. In well-developed males the third and fourth antennal joints show distinct traces of a groove, as in *D. auromarginata* and *D. rubriventris*. The species would fit almost equally well in the genus *Crossidius*, with which *Deltaspis* is very closely allied.

7. Deltaspis mœsta.

D. thoracico minus elongata, nigra opaca, elytris chalybeo-nigris vix nitidis; undique longe [subtus densius] setosa; capite scapoque grosse confluenter punctatis; thorace alveolato, lateribus pone medium valide tuberculatis; scutello lato; elytris apice flexuoso-truncatis, angulo exteriori breviter spinoso, confertissime et subconfluenter punctulatis; ventre apice lato, rufo-hirto.

Long. 7½ lin. ♀.

Hab. Mexico (*Baden, coll. Bates*).

8. Deltaspis (?) virens.

Fere cylindrica, viridi-ænea, erecte pilosa, supra grossissime confluenter punctata; thorace inermi, lateribus

rotundatis; elytris apice conjunctim rotundatis; mesosterno sat convexo; antennis sicut in feminis *Deltaspis* robuste filiformibus subserratis.

Long. 5 lin. ♀?

Hab. MEXICO (*Sallé*).

One example, named *Deltaspis virens* (Sturm), in the Sallé collection.

TRAGIDION (p. 77).

Tragidion carinatum (p. 78).

An example of this species in the Sallé collection is labelled as from Oaxaca.

3. **Tragidion bicolor.**

Angustius, nigrum, opacum, hirsutum, elytris rufis; tuberibus antenniferis parum elevatis, acutis; thorace oblongo-rotundato, medio utrinque breviter tuberculato, dorso vix perspicue calloso; scutello nigro; elytris quam thorax angustioribus, elongatis, parallelis, apice obtuse rotundatis, utrinque costulis angustis tribus parum elevatis; antennis simplicibus, nigris; tibiis posticis circumquaque dense hirsutis, versus basin tenuioribus et nudis.

Long. 8 lin. ♂.

Hab. MEXICO, Guanajuato (*Dugès, coll. Sallé*).

Named *Trichoscelis bicolor*, Dej. Cat., in the Sallé collection. *Trichoscelis* (MS. name) was placed as a synonym to *Tragidion* in Thoms. Syst. Ceramb. p. 199. It differs, in fact, but little from *Tragidion*: the antenniferous tubercles are short, as in *T. carinatum*, but the hind femora are longer and more slender; the densely hairy hind tibiæ it possesses in common with *T. annulatum* and *T. carinatum*.

METALEPTUS (p. 78).

Metaleptus angulatus (p. 78).

To the localities given, add:—MEXICO, Pinos Altos in Chihuahua (*Buchan-Hepburn*); GUATEMALA (*Sallé*); BRITISH HONDURAS (*Blancaneaux*).

Metaleptus coccinatus (p. 79).

To the locality given, add:—MEXICO (*Sallé*).

SCYTHROLEUS (to precede the genus *Tylosis*, p. 81).

Gen. *Tragidio* affinis. Corpus robustum, subcylindricum, undique breviter setosum. Caput antice verticale, frons late quadrata, plana; tubera antennifera breviter cornuta; mandibulæ apice simplices, acutæ. Antennæ (♀?) corpore parum longiores, rufo-annulatæ; articulis a 3° apice penicillatis, et 3°–6^{m} incrassatis. Thorax rhomboideus, sat elongatus, medio angulatim dilatatus. Scutellum late triangulare. Elytra elongato-oblonga, postice perparum angustata, convexa, æqualia, apice obtusissime conjunctim rotundata. Prosternum apice verticale; mesosternum simplex. Abdomen apice latissimum. Pedes breves et robusti; femora modice incrassata, postica brevia; tarsi lati articulo 1° breviter triangulari.

Allied to *Tragidion* by its structural characters, the chief exception being that the

forehead is not separated from the lateral space near the eye by a continuous raised line, but there are traces of a sharp limitation. In general form and sculpture, however, the genus bears no resemblance to *Tragidion*, the form being convex and nearly cylindrical, with the surface densely and finely sculptured, without costæ or other inequalities. The antennæ resemble those of *Tragidion annulatum*, but the joints are more densely hairy at their apices.

1. **Scythroleus picticornis.**

Cylindricus, robustus, obscure niger, subænescens; antennis articulis 4°–11^{m} basi, maculaque verticis, rufis; capite thoraceque grosse et confluenter punctatis; scutello alutaceo; elytris confertissime minute confluenter punctatis; subtus fusco-pubescens, minute punctatus.

Long. 1 in. 3 lin. ♀.

Hab. MEXICO, Bay of Tehuantepec (*Baden, coll. Bates*).

TYLOSIS (p. 81).

Tylosis maculata (p. 81).

Having had an opportunity of examining a typical specimen of this species, named by Leconte, in the Sallé collection, I find it is distinct from the Mexican species, which I describe below as *T. puncticollis*. It is broader in form, with a broad subspherical thorax. No Mexican specimen agreeing with it in form or markings, the species must be withdrawn, as not belonging to our fauna.

1 (A). **Tylosis puncticollis.**

Tylosis maculata (p. 81), nec Leconte.

T. angusticolli proxime affinis, differt thorace semper lateribus distinctius (sed leviter) rotundatis, prosterno nigro, elytrisque macula mediana elongata valde obliqua; cæteris sicut in *T. angusticolli*.

Var. 1. Macula circumscutellari nulla. (*T. puncticollis*, Klug, MS. sec. coll. Sallé.)

Var. 2. Macula mediana cum macula apicali per suturam conjuncta; macula circumscutellari magna, interdum deficienti. (*T. læta*, Sturm, MS. sec. coll. Sallé.)

Long. 4½–7 lin. ♂ ♀.

Hab. MEXICO, Puebla, Izucar, Cuernavaca (*Sallé*), Oaxaca (*Sallé, Höge*).

The typical form, *i. e.* with the circumscutellar spot and median streak distant from the apical spots, exists in some collections as *T. scutellaris*, Chev. MS.; but the MS. name of the species, *T. puncticollis*, Klug, appears to be the most generally adopted.

Tylosis oculata (p. 81).

To the locality MEXICO, add:—Ventanas (*Forrer*), Vera Cruz, Izucar, Puebla (*Sallé*), Misantla, Almolonga (*Höge*).

Tylosis angusticollis.

Tylosis sellata (p. 81), nec Leconte.

Angusta, thorace fere cylindrico; nigra, thorace supra et elytris coccineis, illo callis lævibus quinque, his macula

semiovata circumscutellari, gutta humerali, macula circulari (vel fascia recta) mediana alteraque majori apicali, nigris; subtus fascia prothoracis coccinea; thorace lateribus perparum rotundatis medio fere rectis, dorso subalveolato, grosse punctato; elytris passim subæqualiter discrete sed confertim punctulatis, apice obtusissime rotundatis vel subtruncatis.

Long. 5–6 lin. ♂ ♀.

Var. Macula elytrorum mediana cum macula apicali per suturam conjuncta.

Hab Mexico, Sonora (*coll. Bates*), Ventanas (*Forrer*), Alamos (*Buchan-Hepburn*).

Tylosis sellata (p. 81).

This species must be withdrawn, the Sonora example referred to it proving to be a distinct species, and being included in the foregoing description of *T. angusticollis*.

4. **Tylosis suturalis.**

Supra quam affines crebrius punctata, elytris undique alveolatis; thorace sicut in *T. puncticolli*, oblongo-ovato. Nigra; thorace et elytris coccineis, illo punctis nigris variabilibus 2 vel 4 vel 5; elytris vitta suturali nigra ante apicem semper terminata.

Long. 6–7 lin. ♂ ♀.

Hab. Mexico, Guanajuato (*Dugès in coll. Sallé*).

Named *T. suturalis*, Sturm, MS., in the Sallé collection.

The sutural vitta is very variable in extent; in its fullest development it reaches the base, and is of the width of one third the elytron, and at its feeblest it is reduced to a narrow line along the middle portion of the suture; in some examples it is entirely wanting, and unless more than two spots are then present on the thorax, the species would with difficulty be distinguished from *T. oculata*.

5. **Tylosis jimenezi.**

Tylosis jimenezi, Dugès, La Naturaleza, iv. p. 186, t. 6. fig. 11[1].

Hab. Mexico, Guanajuato, Silao, Leon[1] (*Dugès*), Lerdo (*Flohr*), Saltillo in Coahuila (*Dr. Palmer*).

A large species (reaching in some examples a length of nearly 10 lines), distinguished by its broad, strongly rounded thorax, the middle of the sides of which is sometimes angulated, or even forms a short conical tubercle. The punctuation of the elytra is very coarse near the base, and minute and confluent towards the apex. The elytra are more variegated with black than in *T. puncticollis*, the spots being variable; but in all the varieties the species may be distinguished by the apex of the elytra being of the red ground-colour, and the subscutellar and humeral spots elongated.

HŒGEA (to follow the genus *Tylosis*, p. 81).

Gen. *Tylosi* proxime affinis; differt præcipue thoracis lateribus utroque sexu tuberculo acuto armatis; corpore magis elongato; metasterno valde convexo.

Closely resembling *Tylosis* in colours and markings as well as in structure, but

differing in the thorax having in the middle of each side a pointed tubercle, and the mesosternum having a conical convexity. In form of body it is more elongate than any species of *Tylosis*, but in the peculiarity of having 12-jointed antennæ in both sexes it agrees with that genus, and not with *Oxoplus*, to which it might otherwise be referred. All three genera agree in the mandibles being broad and notched at their apices.

1. **Hœgea distigma.** (Tab. XXI. fig. 25, ♂.)

Nigra, nitida, brevissime setosa, thorace supra et elytris testaceo-rufis vel aurantiacis, illo callis quatuor, his utrinque paullo post medium macula rotundata discoidali, nigris; thorace grosse alveolato-punctato; scutello nigro, triangulari; elytris undique confertim sed discrete punctatis, apice flexuoso-truncatis, angulis suturali et externo breviter spinosis.

Long. 6½–9 lin. ♂ ♀.

Hab. MEXICO, Bobo (*Höge*).

Taken in great abundance in one locality only.

CROSSIDIUS (p. 81).

Crossidius trivittatus (p. 82).

Mr. Flohr has taken this species in some numbers at El Salto, near Huehuetoca, and finds it extremely variable with regard to the dark stripes of the elytra. The extreme varieties are,—one in which the elytra are wholly tawny yellow (with the exception of a narrow sutural border), and another in which they are entirely dark brassy green. In some examples the thorax has two or three large tawny spots.

The species agrees with *Crossidius* (besides the characters previously mentioned) in the mandibles being broad and notched at the apex.

MANNOPHORUS (p. 82).

3. **Mannophorus forreri.** (Tab. XXI. fig. 24.)

Valde elongatus, fere cylindricus, fulvo-rufus; capite, antennis, pedibus, meso- et metasterno, maculis quinque thoracis, scutello et elytrorum triente apicali, nigris; thorace rotundato, basi constricto angulisque posticis porrectis, dorso confluenter punctato; scutello apice attenuato; elytris apice oblique truncatis, utrinque bicostatis, punctulatis, apice grossius intricato-punctatis; subtus tenuiter griseo-pubescens.

Long. 10–11 lin. ♂ ♀.

Agrees better generically with *Mannophorus lætus* than with *Ischnocnemis*, the thorax being broader and rounder than in members of the latter genus, and the antennæ, in the male especially, shorter, and not much longer than the body.

ISCHNOCNEMIS (p. 83).

Ischnocnemis costipennis (p. 83).

♂. Thorax niger. (*Leptocnemus costipennis*, Dej. Cat.)

♀. Thorax fulvus, nigro-tripunctatus. (*Leptocnemus tripunctatus*, Dej. Cat.) Variat: vel elytra fulva marginibus angustis nigris, vel nigra costulis pallidis.

The scutellum is not always prolonged behind into a sharp point; and there remains no character of sufficient importance to separate the genus from *Mannophorus*, which name will have the priority if the two genera are to be reunited. The antennæ in the males are much longer, and in both sexes the eleventh joint is appendiculated; but this latter peculiarity is shared in by *Mannophorus forreri*. The simple mesosternum is the sole constant character which separates the genus from *Sphenothecus* (sensu Dupont).

Ischnocnemis minor (p. 83).

The precise locality for this Mexican species is Puebla, according to the Sallé collection.

3. Ischnocnemis sexualis.

Mannophoro ferreo affinis et similis. Multo angustior, sublinearis; niger, elytris chalybeo-nigris; thorace anguste oblongo, perparum rotundato, confertim sed minus grosse confluenter punctato; scutello late triangulari; elytris apice breviter truncatis, subnitidis, confertim punctulatis, utrinque costulis duabus angustis lævibus; antennis (♂) quam elytra longioribus, articulo 1° quam præcedens longiori, integro.

Long. 5 lin. ♂.

Hab. Mexico (*Sallé, Bates, ex coll. Baden*).

Named *Leptocnemus sexualis*, Chevr. (MS.), in the Sallé collection. The choice of the specific name is enigmatical, the other sex of the species not being represented in the same collection. But it is probable that *Mannophorus ferreus* is the female of *I. sexualis*, and was known to Chevrolat, in which case the name would be applicable; the differences between the two in form and sculpture being very remarkable.

4. Ischnocnemis cærulescens.

I. sexuali quoad formam similis, sed differt elytris haud costulatis, etc. Anguste cylindricus, supra cyaneus, nitidus, subtus niger; thorace cylindrico, basi perparum constricto, sat confertim sed discrete foveolato; scutello triangulari, apice haud prolongato; elytris apice obtuse truncatis, undique sat laxe punctatis, utrinque costula unica obsoletissima; antennis [♀?] quam corpus longioribus, articulo 11° quam præcedens paullo longiori, integro; tarsis posticis brevibus; mesosterno simplici.

Long. $4\frac{1}{2}$ lin.

Hab. Mexico (*Baden, coll. Bates*).

SPHENOTHECUS (p. 84).

Sphenothecus tomentosus (p. 84).

I have seen no specimen of *Sphenothecus*, in the large series of this genus examined, which agrees with Dupont's figure of *S. tomentosus*. One labelled *S. tomentosus* in the Sallé collection is an approach to it, the central black stripe of each elytron having a short white line in the middle, forming the commencement of a division of the black stripe into two, but the thoracic marks are not different from the typical *S. trilineatus*. *S. tomentosus* is probably a very rare variety or aberration of *S. trilineatus*.

Sphenothecus trilineatus (p. 84).

To the localities given, add:—MEXICO, Almolonga (*Höge*).

Nearly all Herr Höge's numerous specimens differ from the typical form as figured by Dupont in the lateral white stripe of the elytra being broad and reaching the apex. An example of this variety in the Sallé collection is labelled "*S. lateralis*, Chev., Mexico." The specimen ticketed *S. tomentosus*, Dup., in the same collection is a further varietal development, in which the lateral white stripe is still broader (leaving only a very narrow margin of the black ground-colour) and the central black stripe shows the commencement of a division into two.

Sphenothecus bivittatus (p. 84).

To the Mexican locality given, add:—Monclova in Coahuila (*Dr. Palmer*).

Sphenothecus picticornis (p. 84).

To the locality MEXICO, add:—Puebla, Cuernavaca (*Sallé*).

Sphenothecus cyanicollis (p. 85).

To the locality MEXICO, add:—Vera Cruz (*Sallé*), Almolonga (*Höge*).

8. **Sphenothecus luteicollis.**

Valde elongatus sublinearis, supra sat depressus, niger nitidus; thorace supra fulvo-aurantiaco, macula irregulari dorsali nigra (lævi); elytris testaceo-fulvis; capite thoraceque grosse confluenter punctatis, hoc relative brevi, medio dilatato lateribusque medio angulatis; scutello late triangulari, apice prolongato acuto; elytris postice ♂ gradatim recte angustatis, ♀ elongatis oblongis, apice truncatis, supra confertim punctatis utrinque costis validis lævibus tribus; mesosterno triangulariter porrecto; antennis quam corpus ♂ longioribus, ♀ vix brevioribus, articulo 11° haud appendiculato; tarsis latis et brevibus.

Long. 8–9 lin. ♂ ♀.

Hab. MEXICO, Guanajuato (*Dugès, coll. Sallé*).

Named *Ischnocnemis luteicollis*, Dugès, in the Sallé collection, but apparently not yet described by its namer. Although it has much similarity in form and colours to *I. costipennis* ♀, it cannot be referred to the genus *Ischnocnemis*, on account of its elevated and prominent mesosternum, which is the only constant character that distinguishes *Sphenothecus* from *Mannophorus* and *Ischnocnemis*.

MUSCIDORA (p. 85).

As remarked above under the genus *Deltaspis*, *Muscidora tricolor*, Thoms., may possibly be the same species as *Deltaspis nigripennis*; if this should prove to be the case, and the slight characters which distinguish *D. nigripennis* from the other species of *Deltaspis* be considered insufficient for generic separation, the name of the species would stand as *Deltaspis tricolor*, Thoms. (*D. nigripennis*, Bates).

ENTOMOSTERNA (p. 85).

Distinguished from *Sphenothecus*, *Mannophorus*, and *Ischnocnemis* by the elongated hind legs and long slender tarsi. The mesosternum is not produced, but in *E. eburata*, which has the nearest resemblance to the *Sphenotheci*, it is more convex than in the other species.

Entomosterna cruentata (p. 85).

To the Mexican localities given, add:—Playa Vicente (*Sallé*), Cerro de Plumas (*Höge*).

The example from Cerro de Plumas differs from the others by the feebleness of the elytral costæ, which are scarcely perceptible, and opaque like the rest of the surface.

Entomosterna sanguiniventris (p. 85).

To the locality MEXICO, add:—Playa Vicente (*Sallé*).

This species has no trace of elytral costæ, and might well be referred to *Batyle*, or, considering the longer antennæ, to a new genus allied to *Batyle*.

Entomosterna trucidata (p. 86).

To the localities given, add:—MEXICO, Alvarez Mountains, San Luis Potosi (*Dr. Palmer*).

Entomosterna miniatocollis (p. 86).

To the Mexican locality given, add:—Panistlahuaca, Puebla (*Sallé*), Ventanas (*Forrer*), Misantla, Cerro de Plumas (*Höge*).

PLEUROMENUS (p. 87).

Pleuromenus baccifer (p. 87).

To the locality given, add:—MEXICO, Oaxaca (*Sallé*); GUATEMALA (*Mus. Stuttgart*).

The single male example from Oaxaca forms a variety in which only two of the lateral bosses of the thorax and the hind angles are crimson; it is much smaller than Nicaraguan specimens, measuring $5\frac{1}{4}$ lin.

Pleuromenus semicostatus (p. 87).

To the locality given, add:—MEXICO, Istapa in Oaxaca (*Sallé*).

The Mexican example is a female, the type specimen from Nicaragua being a male. The sexual differences in the antennæ prove to be the same as in *P. baccifer*, these

organs in the male being more than twice the length of the body and attenuated towards the apex, in the female two thirds the length of the body, thickened towards the apex, and having a small conical and acute false joint at the apex of the eleventh; the inner apical angles of joints 4–11 are produced and acute in the female of both species.

ÆGOIDUS (to follow the genus *Basiptera*, p. 88).

Ægoidus, Buquet, Rev. Zool. 1838, p. 253; Lacordaire, Gen. Col. ix. p. 197.
Phædinus (partim), Dupont, Suppl. to Monogr. Trachyderides in Guér. Mag. Zool. Ins. 1840, p. 5, t. 31.

Three species have been referred to this genus, found in the northern regions of South America.

1. Ægoidus debauvei.

Phædinus debauvei, Guérin, Rev. Zool. 1838, p. 287; Dupont, Suppl. to Monogr. Trachyderides in Guér. Mag. Zool. Ins. 1840, p. 5, t. 31[1].
Trachyderes venustus, Newman, Proc. Zool. Soc. 1840, p. 3[2].

Hab. Panama (*Boucard*).—South America, Venezuela, British Guiana [1 2].

One female example from Panama, agreeing well with Dupont's figure.

2. Ægoidus calligrammus.

Elongato-oblongus, subcylindricus, castaneo-fuscus; elytris castaneo-rufis, fasciis tribus flavis, viz. 1ª basali, scutellum attingente, postice flexuosa, 2ª mediana, angustiori, paullo obliqua et arcuata, suturam longe haud attingente, 3ªque apicali, lata nec suturam nec angulum suturalem apicalem attingente; thorace utroque sexu confertim grosse confluenter punctato, dorso tuberculis elevatis quinque nitidis, lateribus tuberculo mediano conico et antice angulato vix tuberculato, prope basin constricto; scutello valde elongato, sparsim subtiliter punctulato, concavo; elytris apice valde flexuosis et extus dentatis, dorso subtiliter disperse punctulatis.
Long. 8–12 lin. ♂ ♀.

Hab. Panama (*Boucard*).

The sexes do not differ in the form and sculpture of the thorax.

DENDROBIAS (p. 88).

Dendrobias mandibularis (p. 88).

To the synonymy, add:—Var. *D. basalis*, Dupont, Suppl. to Monogr. Trachyderides in Guér. Mag. Zool. Ins. 1840, p. 6, t. 33[1].

To the localities given, add:—Mexico, Northern Sonora (*Morrison*), Alamos (*Buchan-Hepburn*), Ventanas, Presidio (*Forrer*), Mexico city, Bobo (*Höge*), Oaxaca, Puebla (*Sallé*); British Honduras, Rio Hondo (*Blancaneaux*); Guatemala, El Reposo (*Champion*).—Colombia, Bogota [1].

Of the rare variety, *D. basalis*, Herr Höge brought home one example from Bobo, Mexico.

TRACHYDERES (p. 89).

Trachyderes succinctus (p. 89).

To the locality given, add:—PANAMA (*Boucard*), Volcan de Chiriqui, Bugaba, Tolé (*Champion*).

1 (A). **Trachyderes subfasciatus.**

Trachyderes subfasciatus, Dupont, Monogr. Trachyderides, Mag. Zool. Ins. 1836, p. 38, t. 158. fig. 1 [1].

Hab. PANAMA, Taboga Island (*Champion*, *J. J. Walker*).—VENEZUELA (*coll. Bates*); GUIANA, Cayenne [1].

Four males from Taboga Island agreeing with Dupont's description and figure, except that the elytra are not narrowed at the apex, but obtusely rounded or subtruncated as in *T. succinctus*. In light-coloured examples a black fascia is faintly visible in the position of the white belt of the elytra of *T. succinctus*. In other colours, in the broad scutellum, and the roughened basal joints of the antennæ the species resembles *T. succinctus*, of which it appears to be a variety or aberration.

Trachyderes subpilosus (p. 89.)

To the localities given, add:—GUATEMALA, Cerro Zunil (*Champion*); PANAMA (*Boucard*), Volcan de Chiriqui (*Champion*).

Trachyderes elegans (p. 90).

To the localities given, add:—MEXICO, Juquila, Cordova, Oaxaca (*Sallé*), Almolonga, Tehuacan (*Höge*); GUATEMALA, Coban (*Champion*).

The following is a beautiful colour variety, somewhat resembling *T. hilaris*:—

Var. *T. eximius* (Chev. MS.). Elytris nigris, fascia mediana (sicut in forma typica) testaceo-flava, macula utrinque basali, altera majori apicali, suturam attingente, aurantiacis.

Hab. MEXICO, Oaxaca (*Sallé*).

The prevailing form of the species, judging from a large series obtained by Herr Höge at Jalapa, has light tawny-red or orange-brown elytra, with broadish black margins to the median band; this is named *T. vicinus* (Chevr. MS.) in the Sallé collection.

Individuals of *T. elegans* sometimes approach very closely in colours light-coloured examples of *T. subpilosus*; in such cases the testaceous-yellow lateral margin of the elytra of *T. elegans*, extending from the median belt nearly or quite to the shoulder, will prove a good distinguishing character.

6. **Trachyderes spinicollis.**

T. succincto major, magis elongatus; *T. reichei* (Dup.) et *T. cingulato* (Klug) affinis, antennis (♀) scapo crasse clavato, fere lævi, articuloque 3° gradatim sat valde dilatato-compresso. Castaneo-niger, elytris apice

utrinque macula elongata (nec suturam nec marginem attingente) fulvo-testacea; antennis nigris, articulis 3°–7^{m} basi, 8°–11^{m} totis, fulvis; thorace antice et postice magis angustato, tuberculo laterali mediano valde elongato subacuto; scutello quam in *T. succincto* angustiori magis elongato; elytris subtiliter coriaceis, apice subtruncatis; corpore subtus femoribusque castaneo-nigris, tibiis et tarsis fulvis.
Long. 16 lin. ♀.

Hab. MEXICO, Tres Marias Islands (*Forrer*).

Two females only.

LISSONOTUS (p. 90).

Lissonotus multifasciatus (p. 90).

To the localities given, add:—MEXICO, Vera Cruz, Izucar, Chiapas, Puebla (*Sallé*), Vera Cruz (*Höge*), Ventanas (*Forrer*); GUATEMALA, El Reposo (*Champion*); SALVADOR (*Sallé*); PANAMA, San Feliz, Tolé, Taboga Island (*Champion*).

Var. Niger, interdum supra fortius punctatus, elytris fascia mediana albo-testacea. (*L. puncticollis*, Dup. in Sallé collection.)

Hab. NORTH AMERICA, Cape St. Lucas, California (*coll. Sallé*).—MEXICO, Ventanas (*Forrer*), Alamos (*Buchan-Hepburn*), Puebla (*Sallé*).

Examples of the black variety, more strongly punctured than others, and with denser and longer hairs on the thorax, might be thought to constitute a distinct species, if this form were not connected with the typical *L. multifasciatus* by numerous gradations. Some of the Ventanas specimens have a dull reddish thorax, with distinct traces of the characteristic black fascia.

2. **Lissonotus corallinus.**

Lissonotus corallinus, Dupont, Monogr. Trachyderides in Guér. Mag. Zool. Ins. 1836, p. 11, t. 144. f. 2[1].

Hab. PANAMA (*Boucard*).—COLOMBIA [1], Santa Marta; VENEZUELA.

MEGADERUS (p. 91).

Megaderus bifasciatus (p. 91).

To the locality given, add:—MEXICO, Guanajuato (*Dugès in coll. Sallé*).

Megaderus latifasciatus (p. 91).

To the localities given, add:—PANAMA (*Boucard*), Bugaba (*Champion*).

3. **Megaderus stigma.**

Cerambyx stigma, Linn. Syst. Nat. ed. xii. p. 635.
Megaderus stigma, Dupont, Monogr. Trachyderides in Guér. Mag. Zool. Ins. 1836, p. 3, t. 141. f. 1[1].

Hab. PANAMA, Taboga Island (*Champion*).—SOUTH AMERICA, Guiana [1], &c.

PHRYNIDIUS (p. 92).

Phrynidius echinus (p. 93).

To the localities given, add:—GUATEMALA, Senahu, Sinanja, Cerro Zunil (*Champion*); PANAMA, Volcan de Chiriqui (*Champion*).

In the description at p. 93, with reference to the length of the third antennal joint, the word "again" was accidentally omitted; the third joint is about half as long *again* as the scape. The male, as in the other species of the genus, is narrower than the female.

Phrynidius inæqualis (p. 93).

To the Mexican localities given, add:—Las Vigas (*Höge*).

4. **Phrynidius asper.**

P. echino affinis; differt corpore magis elongato, antennisque robustioribus, articulo 3° scapo paullulum breviori, etc. Elongato-ovatus, obscure fuscus, thorace grossissime confuse punctato-tuberculato; elytris ovatis, valde convexis, tuberculis magnis obsitis, interstitiis aspere punctato-granulatis; antennis articulis 3°–4^{m} longitudine fere æqualibus, singulatim quam scapus paullo brevioribus.

Long. 3–5½ lin.

Hab. GUATEMALA, Totonicapam 8500 to 11,000 feet (*Champion*). Under stones on mountain-tops.

In the relative length of the third and fourth antennal joints and the scape this species is intermediate between *P. echinus* and *P. inæqualis*. In its ovate and strongly tuberculated elytra it comes near *P. echinus*; but in all the numerous examples the body and elytra are conspicuously more elongate than in that species. The rough irregular sculpture of the thorax and the interstices of the elytra form also a valid mark of difference from *P. echinus*.

PARMENA (to follow the genus *Phrynidius*, p. 93).

Parmena, Latreille, Règne Anim. ed. 2, v. p. 125; Lacordaire, Gen. Col. ix. p. 275.

A well-known European genus, hitherto supposed to be restricted to the Mediterranean region: six species have been described. The following species has a close resemblance to *P. solieri*, Muls., but differs curiously in important points of structure. For example, the claws are decidedly more parallel, *i. e.* "divergents," according to Lacordaire's phraseology, whilst in *Parmena* they would be considered "divariqués;" they are not, however, so closely approximated as in the "Niphonini" group, and seem to vary a little in the tarsi of one and the same individual; thus it seems inexpedient, at least until further specimens are obtained, to insist on the value of the character and remove the insect to a quite different group, *e. g.* the "Apomecynini," where it would

form quite an isolated genus. A further difference from *Parmena* is the rather widely open suture of the anterior, and the decidedly open middle, acetabula.

1. **Parmena villosa.**

P. solieri simillima, differt elytris angustius ovatis thoraceque confertissime confluenter punctato. Sat angusta, suboblongo-ovata, nigra, undique griseo-erecte pilosa et griseo-incumbenti pubescens; thorace sicut in *P. solieri*; elytris sat confertim æqualiter et minus grosse, hic illic sublineatim, punctatis; antennis ab articulo 5° basi anguste griseis.

Long. 4 lin. Two examples.

Hab. MEXICO (*Sallé*). Named *Parmena villosa*, Sturm, MS., in the Sallé collection.

MECYNOME (to precede the genus *Moneilema*, p. 93).

Corpus angustissime ovatum, mediocriter convexum, supra parum inæquale. Caput inter antennas concavum; tuberibus antenniferis oblique elevatis, apice obtusis; frons transversim quadrata; oculi infra sat angusti obliqui, supra valde distantes. Labrum basi epistomate (sensu Lacordaire) munitum. Antennæ corpore longiores, sat graciles, filiformes, subtus sparsissime breviter setosæ, scapo fere sicut in gen. *Leiopo* elongato, basi intus angustato deinde usque ad apicem cylindrico; articulo 3° gracili, quam scapus longiori; 4° paullo breviori, cæteris brevioribus gradatim decrescentibus. Thorax subcylindricus, lateribus longe post medium tuberculo parvo conico, deinde usque ad basin sinuato-angustatis. Elytra basi thorace parum latiora, humeris obtusissimis, deinde usque ultra medium leniter dilatatis, versus apicem citius angustatis, apice singulatim subacuminatis. Pedes mediocres; coxæ antice salientes; acetabula extus clausa; prosterno inter coxas depresso, angusto; mesosternum angustum fere planum; acetabula extus clausa; pedes intermedii et posteriores valde approximati; femora gradatim clavata; tibiæ intermediæ extus paullo sinuatæ; tarsi mediocres, articulo unguiculari sicut in *Moneilema* lato subdepresso; ventris segmentum basale processu semiovato.

This peculiar form belongs to Lacordaire's artificial group "Parmenides." In general form it resembles most the New-Zealand genus *Xyloteles*, but its real affinity is in the direction of *Moneilema*, or rather of *Leptostylus* and *Idephrynus*, of the "Acanthocinini" group.

1. **Mecynome ænescens.** (Tab. XXII. fig. 5.)

Fusco-ænea, subnitida, parce setosa et subtiliter ochraceo-fusco incumbente pubescens; elytris post medium fascia angustissima, a sutura retrorsum versus marginem oblique ducta, canescenti; antennis rufescenti-fuscis, articulis basalibus singulis griseo pluriannulatis, apicalibus basi carneo-griseis; thorace grosse punctato, dorso trituberculato; elytris confuse punctulatis, utrinque costulis obtusis et parum elevatis 3 vel 4 sæpe interruptis.

Long. 4–4½ lin. ♂ ♀.

Hab. GUATEMALA, Volcan de Agua 8500 to 10,500 feet, Totonicapam 8500 to 10,500 feet (*Champion*).

Found by beating the withered, still attached, leaves of fallen forest-trees.

MONEILEMA (p. 93).

Moneilema albopictum (p. 94).

To the locality given, add:—NORTH AMERICA.—MEXICO, Tehuacan (*Höge*).

A good series of the forms of this genus allied to *M. albopictum* has been supplied

by the collections of M. Sallé and Herr Höge, among which all the species Nos. 2 to 9 can be recognized. Nearly all of them, including the extreme forms *M. albopictum* and *M. carinatum*, were taken apparently together by Herr Höge at Tehuacan; and as connecting varieties are found with them, there can be little doubt that they are all varieties of one and the same species.

Moneilema variolare (p. 95).

A very large series of this species was taken by Herr Höge near the city of Mexico. The difference between the sexes described by M. Thomson is tolerably constant, *i. e.* the male is more or less densely clothed with tawny-brown tomentum and the female glabrous; but numerous females occur in which specks of tomentum are scattered over the surface, and many males have the same character. Large glabrous female examples (one inch long) agree fairly well with Newman's description of *M. blapsides*, but it is impossible to be certain that they are the same species.

11. **Moneilema armatum.**

Moneilema armatum, Leconte, Thoms. Arcana Naturæ, p. 128, t. 13. fig. 2[1].

Hab. North America, near the Mexican frontier[1].—Mexico, Monclova in Coahuila (*Dr. Palmer*).

A single male example, very closely allied to, if not conspecific with, the above species.

12. **Moneilema ebeninum.**

Quoad formam *M. annulato* simile, sed tuberculo thoracico multo distinctiore, sicut in *M. crasso*. Elongato-ovatum, sat angustum, nigrum subopacum, supra impunctatum; antennarum articulis 3° et sequentibus griseo-annulatis, scapo apice simplici; thorace supra lævi, lateribus sparsim indistincte punctatis, utrinque tuberculo elevato conico armatis; elytris convexis, humeris nullis, lævibus, lateribus solum versus humeros sparse punctatis.

Long. 10 lin. ♀.

Hab. Mexico (*Sallé*).

One female example only, named *M. ebeninum*, Dup., in the Sallé collection. It is certainly distinct from other described Mexican species, but may be an extreme variety of one of the North-American species allied to *M. armatum*. The lateral tubercle of the thorax rises abruptly from the sides, and is thus conspicuous though not long. The elytra have vertical sides, but without ridge separating them from the dorsal surface.

13. **Moneilema appressum.**

Monilema appressum, Leconte, Journ. Ac. Phil. ser. 2, ii. p. 160; Col. of Kansas and Eastern New Mexico, p. 21, t. 2. fig. 17[1].

Hab. North America, New Mexico[1].—Mexico, Northern Sonora (*Morrison*).

Specimens received from Mr. Morrison are named *M. appressum*; they agree well with Leconte's description, except in the absence of marked flattening in the basal part of the elytra.

PTYCHODES (p. 95).

Ptychodes trilineatus (p. 95).

To the localities given, add —MEXICO, San Andres Tuxtla (*Sallé*), Ciudad in Durango (*Forrer*), Jalapa, Merida in Yucatan (*Höge*); GUATEMALA, Rio Maria Linda, El Reposo, San Isidro, Mirandilla (*Champion*); PANAMA, Volcan de Chiriqui, Bugaba, Caldera in Chiriqui (*Champion*).

Examples from the State of Panama are distinguishable from those of more northern localities in Central America, as well as from those of South America, by the greater breadth and continuity of the white sutural stripe of the elytra.

Not uncommon in the forests of the "tierra caliente" of the Pacific coast-region of Guatemala and of the State of Panama (*Champion*).

1 (A). **Ptychodes candidus.**

P. trilineato quoad formam simillimus. Niger, subnitidus, subtilissime griseo-pubescens, fascia frontali vitta mediana a vertice usque ad elytrorum apices extensa alteraque marginali cretaceo-albo tomentosis, vittis apud elytrorum margines plus minusve dilaceratis, guttulisque nonnullis disci albis; episternis ventrisque lateribus albis; ventris apice in ♀ utrinque nigro-penicillato.
Long. 9–12 lin. ♂ ♀.

Hab. PANAMA, Bugaba (*Champion*).

One male and two female examples. The apical spines of the elytra are in a line with the suture as in *P. trilineatus*.

Ptychodes honduræ (p. 95).

To the localities given, add:—GUATEMALA, Cerro Zunil, Senahu (*Champion*); PANAMA, Bugaba, Volcan de Chiriqui (*Champion*).

Rather common in the forests at elevations of from 4000 to 6000 feet, rare in the low country (*Champion*).

Ptychodes lecontei (p. 96).

Add to the locality given for var. *a*:—GUATEMALA, El Reposo, Torola (*Champion*).

Ptychodes mixtus (p. 97).

To the PANAMA locality given, add:—Bugaba, Tolé (*Champion*).

Ptychodes politus (p. 97).

To the localities given, add:—MEXICO, Santecomapam, Cordova, Orizaba (*Sallé*), Jalapa (*Höge*); BRITISH HONDURAS, Belize (*Blancaneaux*); GUATEMALA, Panima, Panzos, Coban (*Champion*).

TÆNIOTES (p. 97).

Tæniotes scalaris (p. 97).

To the localities given, add:—MEXICO, Santecomapam, Cordova (*Sallé*), Misantla, Cordova (*Höge*); GUATEMALA, Cerro Zunil, Coban, San Juan in Vera Paz, Teleman, Panima, Las Mercedes (*Champion*); PANAMA, Bugaba, David, Caldera in Chiriqui (*Champion*).

Some of the examples from the State of Panama approach very closely the Venezuelan variety *T. univittatus*, Taschenb.

Apparently a common species throughout Central America.

Tæniotes præclarus (p. 98).

To the localities given, add:—COSTA RICA (*Van Patten*).

Tæniotes xanthostictus (p. 98).

To the localities given, add:—GUATEMALA, Volcan de Atitlan, Zapote, Cerro Zunil (*Champion*); PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

Var. *T. zunilensis.* Elytra guttulis minutis paucis flavis adspersis, guttis quatuor majoribus obsoletis.

Hab. GUATEMALA, Cerro Zunil (*Champion*). Many examples.

A common though local species in the forest-region of the "tierra caliente" of the State of Panama (*Champion*).

Tæniotes luciani (p. 98).

To the locality given, add:—MEXICO, Santecomapam, Playa Vicente, Cordova (*Sallé*), Misantla (*Höge*); GUATEMALA, Coban (*Champion*).

DELIATHIS (p. 98).

Deliathis incana (p. 99).

To the Mexican locality given, add:—Yucatan (*Boucard*).

Deliathis nivea (p. 99).

Var. *D. detersa.* A forma typica differt elytrorum maculis nigris majoribus plerumque in fasciolas transversas confluentibus.

Hab. Costa Rica (*Van Patten*); Panama, Volcan de Chiriqui 4000 to 6000 feet (*Champion, Trötsch*).

Var. ♀. Thoracis spinis lateralibus nullis.

Hab. Panama, Volcan de Chiriqui (*Champion*).

The five examples of this variety are more or less abraded and imperfect, but in the unabraded parts of the elytra the black spots are seen to be much larger than in the Chontales form of *D. nivea*, chiefly on the lateral margins and on the disc, in the latter situation being more or less confluent, and running into short transverse submacular fasciæ. The disappearance of the lateral spine of the thorax in two female examples from Chiriqui is remarkable, as it exists in a male from the same locality; in its place is an obtuse tubercle. The spine, however, varies in form in the other specimens.

HAMMODERUS (p. 99).

Hammoderus spinipennis (p. 100).

To the localities given, add:—Mexico, Capulalpam (*Sallé*), Jalapa (*Höge*); Guatemala, Coban (*Champion*); Costa Rica (*Sallé, Van Patten*).

Hammoderus elatus (p. 101).

To the locality given, add:—Panama, Volcan de Chiriqui (*Champion*).

8 (A). **Hammoderus granulosus.** (Tab. XXII. fig. 1.)

H. sallæi affinis, sed minor maculisque cretaceis distinctioribus ornatus. Pallide fuscus, subtiliter griseo-fulvo pubescens; thoracis disco utrinque pauciter nigro-granulato, prope spinam fulvo-liturato; elytris apice inermibus, basi toto æqualiter subtilius et confertim granulatis, postea usque ad apicem discrete punctulatis, fere sicut in *H. elato* et *H. maculoso* cretaceo-plagiatis, viz.:—utrinque maculis majoribus 4 vel 5, 1ª basali, 2ª obliqua laterali ante medium, 3ª versus, 4ª minori prope, apicem et 5ª minore mediana prope suturam, guttis nonnullis cretaceis sparsis; subtus immaculatus; antennis (♀) tenuiter filiformibus, quam corpus multo longioribus.

Long. 13 lin. ♀.

Hab. Mexico, Juquila (*Sallé*). One example only.

8 (B). **Hammoderus laceratus.** (Tab. XXII. fig. 4.)

Subtiliter ochraceo-griseo pubescens, thorace vittis indistinctis ochraceis tribus; elytris (præcipue juxta suturam) lituris parvis tenuibus fulvo-ochraceis maculis majoribus utrinque quatuor valde dilaceratis cretaceis, viz.:—1ª prope suturam versus basin, 2ª obliqua paullo ante medium fere cum 3ª post medium conjuncta, 4ªque parva discoidali prope apicem, prope basin irregulariter minute granulatis deinde usque ad apicem punctulatis, apice ad suturam breviter spinosis; subtus immaculatus, pectore et ventre disperse conspicue punctatis.

Long. 12 lin. ♀.

Hab. Mexico, Juquila (*Sallé*). Two examples.

Differs from *H. inermis* and allies in wanting the basal cretaceous spot, and from

H. lacordairei and *H. nitidus* by the much smaller and scantier granulations of the base of the elytra, the granulæ being few and replaced at a very short distance from the base by punctures. The ragged edges of all the cretaceous spots, and the punctured breast and abdomen, are peculiar to the species.

8 (c). **Hammoderus ornator.** (Tab. XXII. fig. 2, ♂.)

Æneo-fuscus, subtiliter fusco-fulvo pubescens; elytris nitidis, plagis magnis dilaceratis et subconfluentibus, parce fusco-punctatis ornatis, macula basali nulla; thorace nigro-calloso et granulato; elytris apice spina brevi suturali, basi quam in *H. sallæi* grossius et minus confertim granulatis, postea magis disperse punctatis; meso- et metasterno ventrisque segmentis singulis utrinque fulvo unimaculatis.

Antennæ ♂ corpore plusquam duplo, ♀ paullo, longiores.

Long. 17–18 lin. ♂ ♀.

Hab. MEXICO, Orizaba (*Höge*).

Herr Höge brought home a good series of this large and handsome species.

8 (d). **Hammoderus sargi.** (Tab. XXII. fig. 3.)

Maxime elongatus, fere cylindricus, ænescenti-niger, subtiliter obscure griseo pubescens; elytris politis maculis numerosissimis plerumque transversis, cretaceis, ornatis; thorace disco calloso et ruguloso, fasciis duabus indistinctis cinereis; elytris apice inermibus, basi sat confertim granulatis, deinde grossius discrete usque ad apicem punctatis; subtus immaculatus; mesosterno tuberculo magno conico.

♀. Antennæ corpore multo longiores. Segmentum apicale ventrale apice fovea transversa profunda.

Long. $2\frac{1}{4}$ lin. ♀.

Hab. GUATEMALA (*Sarg, coll. Mus. Stuttg.*).

This largest and finest species of *Hammoderus* is dedicated to its discoverer Mr. F. Sarg. The cretaceous spots of the elytra are more transverse than in the other species; the base for some distance is quite free, but the other larger spots lie in the position usual in the genus, viz. two lateral (one before and the other after the middle), and one rounded on the disc near the apex; a rounded spot near the suture and the base (existing in several other species) is also well developed, but between the two large lateral spots, and nearly in the middle of the elytra, there is a large irregular patch formed apparently of the agglomeration of many of the small transverse wavy streaks, of which there are a great number, on the disc and near the suture.

Hammoderus imperator (p. 102).

Specimens of this species in the Sallé collection are labelled as from Izucar and Puebla.

PARMENONTA (p. 104).

Parmenonta valida (p. 104).

To the localities given, add:—MEXICO, Orizaba, San Andres Tuxtla, Cosamaloapam (*Sallé*), Jalapa, Almolonga (*Höge*); GUATEMALA, La Tinta, Teleman, Chacoj, Senahu, and Chiacam (*Champion*).

Parmenonta ovatula (p. 105).

To the Guatemalan locality given, add:—Cerro Zunil, Mirandilla, El Tumbador, Las Mercedes (*Champion*).

Varies in length, in a large series, from 4 to $5\frac{1}{2}$ lines.

Parmenonta minor (p. 105).

To the Mexican locality given, add:—Capulalpam (*Sallé*), Cordova (*Höge*).

Varies in length, in a large series, from $2\frac{1}{2}$ to $4\frac{1}{2}$ lines.

On the average *P. minor* is very much smaller and narrower than *P. ovatula*, and differing, in addition to the characters mentioned in the diagnosis, by the punctuation of the elytra being coarse and arranged partly in striæ: in *P. ovatula* the punctuation is finer and shallower and irregular.

Parmenonta albisetosa (p. 105).

To the Guatemalan localities given, add:—Panajachel, Volcan de Agua 8500 to 10,500 feet (*Champion*).

5. **Parmenonta fulvosticta.**

Gracilis, elytris angustissime ovatis, thorace lateribus elytrisque guttis numerosis dispersis fulvo-pubescentibus; thorace cylindrico, grosse subconfluenter punctato; elytris apice ad suturam triangulariter breviter emarginatis, grosse (versus suturam medio lineatim) punctatis; tibiis minus dilatatis.

Long. $3\frac{1}{4}$ lin.

Hab. Mexico, Cordova (*Höge*).

ADETUS (p. 106).

Adetus muticus (p. 106).

To the localities given, add:—Mexico, Cordova (*Sallé*, *Höge*); British Honduras, Rio Hondo (*Blancaneaux*); Guatemala, Las Mercedes, Mirandilla, Cerro Zunil, El Reposo, Volcan de Atitlan (*Champion*); Panama, Volcan de Chiriqui, Bugaba (*Champion*).

This species, as defined by its original describer, varies very little throughout its wide distribution; the narrow white spots on the elytra are more or less numerous, and the larger pale spot behind the middle of each elytron is more or less developed. Specimens from the volcano of Chiriqui scarcely differ from those found on the Amazons and near Rio de Janeiro. But in the plains of Chiriqui a colour-variety occurs, conspicuous for the brighter fulvous hue of the head, the lateral stripe of the thorax, and the curved baso-lateral stripe of the elytra, the latter margined with white specks and enclosing (like the stripes of the thorax) a dark-brown central area.

In company with this species at Rio Janeiro, Bugaba, and in several localities in

Guatemala, a slender species occurs coloured and marked exactly as in *A. muticus* and assuming the same slight local peculiarities as the companion species. It has, however, a cylindrical instead of a trapezoidal thorax and a plane mesosternum, with less retractile head. The latter structural peculiarities would make it a member of a distinct genus (*Tautoclines*), according to Thomson and Lacordaire; I strongly suspect it to be the male of *A. muticus*, but have no positive evidence of the fact. It is described further on as *A. consors*.

Adetus costicollis (p. 106).

To the locality given, add:—GUATEMALA, Cerro Zunil (*Champion*); PANAMA, Volcan de Chiriqui (*Champion*).

Adetus griseicauda (p. 106).

To the locality given, add:—PANAMA, Bugaba (*Champion*).

Adetus scissicauda (p. 107).

To the locality given, add:—MEXICO, Tuxtla (*Sallé*).

Adetus strigulatus (p. 107).

To the localities given, add:—PANAMA, San Lorenzo, Bugaba (*Champion*).

Adetus binotatus (p. 107).

To the localities given, add:—BRITISH HONDURAS, Belize, Rio Hondo (*Blancaneaux*).

Adetus subellipticus (p. 107).

To the Guatemalan locality given, add:—San Isidro, Cerro Zunil, Las Mercedes, Volcan de Atitlan, Mirandilla (*Champion*).

Adetus leucostigma (p. 108).

To the localities given, add:—PANAMA, Volcan de Chiriqui (*Champion*).

Adetus pictus (p. 109).

To the locality given, add:—GUATEMALA, San Juan and Panzos in Vera Paz (*Champion*).

13. **Adetus consors.**

A. mutico quoad colores et signaturas simillimus; sed differt mesosterno plano, arcuato, prosterno antico haud abrupte declivi, thoraceque cylindrico et elongato. Angustus, cylindricus, fuscus, thorace vitta lata laterali fulvo-ochraceo; elytris plus minusve albo- vel fulvo-guttulatis, apice macula communi rotundata nigro-velutina, cinereo-marginata.

Long. $3\frac{3}{4}$–$4\frac{1}{2}$ lin.

Hab. GUATEMALA, Chinautla (*Salvin*), Las Mercedes, Volcan de Atitlan, Cerro Zunil (*Champion*); PANAMA, Bugaba (*Champion*).—SOUTH AMERICA, Rio Janeiro (*Squires*).

Possibly the male of *A. muticus*, Thoms., notwithstanding the great difference in the form of the pro- and mesosterna.

I have not yet seen examples of *A. consors* from the other localities in which *A. muticus* is known to occur, viz.:—Amazons, Volcan de Chiriqui, Chontales, and Mexico.

Mr. Squires took near Rio Janeiro specimens of a form very similar to *A. consors*, but having the strongly convex mesosternum and other structural characters of *A. muticus*. This is evidently the *A. prœustus*, Thomson, and is more probably the true male of *A. muticus*.

14. **Adetus curtulus.**

A. mutico affinis, multo minor, capite thoraceque relative multo longioribus. Subcylindricus, brevis, obscure fuscus, tomento subtili fulvescenti-fusco vestitus, elytris guttis numerosis, hic illic confluentibus, atro-fuscis, guttaque angusta utrinque sublaterali paullo post medium alba, thorace lateribus pallide fuscis; capite thoraceque grossissime irregulariter punctatis; elytris apice brevissime oblique truncatis, basi lineatim, lateribus et apice confuse, grosse punctatis, versus suturam punctis multo rarioribus; ventre immaculato; mesosterno elevato, convexo, antice oblique declivi.

Long. $2\frac{1}{2}$–$3\frac{1}{4}$ lin.

Hab. PANAMA, Bugaba (*Champion*).

Differs from *A. muticus* by the head and thorax together being as long as half the elytra (in that species they are not one third the elytral length), also in wanting the black apical spot, which is replaced by a cluster of large punctures coloured blackish, and in its numerous dusky markings.

15. **Adetus postilenatus.**

A. costicolli proxime affinis, quoad formam similis; differt elytrorum apice fusco-nigro maculaque utrinque reniformi anteapicali sordide ochracea. Cylindricus, sordide fulvo-fuscus; thorace indistincte ochraceo vittato, grosse subconfluenter punctato; elytris apice obtusis, punctis minoribus et majoribus distantibus lineatim digestis; mesosterno convexo et porrecto, antice emarginato, verticali.

Long. 3–$5\frac{1}{4}$ lin. ♂ ♀.

Hab. GUATEMALA, Mirandilla (*Champion*); PANAMA, Bugaba (*Champion*).

16. **Adetus mucoreus.**

Subcylindricus, fuscus sed castaneo-rufus; capite fulvo-, thoracis lateribus plagaque elytrorum anteapicali cretaceo-, tomentosis; thorace grosse sat confertim punctato; elytris apice fere integris, suturam versus lineatim, latera versus confuse, punctulatis, stria suturali impressa a medio usque ad apicem; corpore subtus griseo-pubescenti; mesosterno leviter arcuato, supra plano.

Long. $3\frac{1}{2}$ lin.

Hab. PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

17. **Adetus bacillarius.** (Tab. XXII. fig. 6.)

Linearis, supra fulvescenti-fuscus nigro-fusco variegatus, subtus nigro-fuscus; thorace lateribus, elytris humeris margineque angusto apicali, sordide ochraceis, guttis utrinque discoidalibus duabus albescentibus, viz. altera post medium, altera paullo ante apicem; thorace oblongo, medio grosse confluenter punctato; elytris apice obtuse fere recte truncatis, basi, lateribus et apice grosse sat confertim punctatis, prope suturam lineatim, disco posteriori sparsim, punctatis; antennis atro-fuscis, articulis 1°–3^{m} et 4° basi sordide ochraceis; mesosterno plano, haud elevato; prosterno arcuato.

Long. $3\frac{1}{4}$–$5\frac{1}{2}$ lin. ♂ ♀.

Hab. GUATEMALA, Volcan de Atitlan, Chacoj, Mirandilla (*Champion*); PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

Allied to *A. cylindricus*, Bates, from the Amazons, which differs in having a narrow tawny-coloured fascia near the apex of the elytra. A closely allied species occurs near Rio de Janeiro.

A very large number of examples were captured by Mr. Champion; all were found by beating the withered, still attached, leaves of fallen trees in fresh clearings in the forest.

18. **Adetus nitens.** (Tab. XXII. fig. 7.)

A. antennato et *A. binotato* quoad formam similis, sed lætius coloratus. Angustissime ovatus, castaneo-fuscus politus, vertice thoraceque vitta laterali, elytris utrinque vitta basali ab humero usque versus medium discum curvata maculisque duabus posterioribus (altera obliqua subreniformi longe post medium, altera minori irregulari paullo ante apicem) ochraceis, guttis nonnullis ochraceis et nigris apud suturam et discum; capite et thorace grosse et discrete punctatis; elytris versus apicem gradatim angustatis, apice oblique breviter sinuato-truncatis, angulis suturali et exteriori acutis; corpore subtus polito, lateraliter fulvo-maculato; antennis nigris, articulis 1°–3^{m} totis, 4°, 9° et 10° basi, griseis; mesosterno vix elevato, supra plano vel concavo.

Long. 4–5 lin. ♂ ♀.

Hab. PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

Similar in form to *A. antennatus*, but the apex of the elytra rather more strongly notched, with the broader external angle of the notch and the sharp sutural spine generally longer. In markings it differs conspicuously in the much more compact ochreous tomentum and sharper definition of the broad vittæ and spots.

Same habits as the preceding.

PTERICHTHYA (p. 109).

Pterichthya pisciformis (p. 110).

To the localities given, add:—MEXICO *, Cerro de Plumas (*Höge*); GUATEMALA, Cerr Zunil, Las Mercedes (*Champion*).

* The reference of the locality "MEXICO" to Thomson's original description is an error. The locality given by the author was Guatemala.

Pterichthya furculicauda (p. 110).

To the Guatemalan localities given, add:—Las Mercedes, El Tumbador, Cerro Zunil, Volcan de Atitlan (*Champion*).

4. **Pterichthya obliqua.**

P. pisciformi proxime affinis, sed differt corpore magis lineari, antennarum articulis 6°–10ᵐ griseo-annulatis, etc.

Æneo-fusca, toto tenuiter ochraceo-fusco pubescens, nigro-fusco piperita, vertice vittis duabus, thorace tribus, fulvo-ochraceis; elytris utrinque vittis duabus obliquis parallelis, cinereis, prima (nec humerum nec marginem attingente) ante, secunda post, medium; thorace cylindrico dorso confertim grosse punctato; scutello ochraceo; elytris apice extus paullo minus prolongatis, angulo suturali spinoso; confuse, versus basin grossius, punctatis.

Long. 4 lin.

Hab. MEXICO (*coll. Bates*).

Received from M. Deyrolle with the name of *P. pisciformis*, Thoms., but evidently a different species.

PTERICOPTUS (p. 111).

Ptericoptus caudalis (p. 111).

To the locality given, add:—MEXICO, Cerro de Plumas (*Höge*); GUATEMALA, Las Mercedes, Pantaleon, San Isidro (*Champion*).

The single specimen described proves to be a colour-variety of the species, in which the irregular blackish markings of the disc of each elytron are much developed in darkness of colour and in extent. In all the other examples subsequently received the elytra are pale ochreous-brown, with a sutural vitta (extending from the base to a little beyond the middle) and a curved oblique subapical spot (not reaching the suture) velvety black; the ochreous disc of the elytra is variegated (especially behind the middle) with faint dusky spots and streaks.

Ptericoptus panamensis (p. 111).

To the locality given, add:—PANAMA (*Boucard*), Volcan de Chiriqui (*Champion*).

In most examples the elytra have on each side near the apex a curved black spot which does not extend towards the suture as in the specimen which served in originally describing the species. The antennæ are much shorter and thicker than in *P. caudalis*.

4. **Ptericoptus fuscus.**

P. griseolo affinis, sed multo major elytrisque utrinque macula anteapicali curvata nigro-velutina. Fusco-ochraceus, vertice maculis triangularibus binis, thorace vittis dorsalibus duabus approximatis; elytris vittula suturali abbreviatissima prope scutellum, maculaque curvata utrinque apicali, fusco-nigris; elytris disco obscure fusco variegato, capite et thorace vitta laterali obscure fusca; elytris apice fere recte truncatis,

dorso prope suturam breviter obtuse costato; antennis modice incrassatis, nigris, articulis 1°–2ᵐ et 3° basi ochraceo-fuscis, 4°–5ᵐ et 8°–11ᵐ basi griseis.

Long. 8 lin.

Hab. MEXICO (*Sturm, in coll. Sallé*).

Named "*Hebestola fusca*, Sturm, MS.," in the Sallé collection. The apex of the elytra is truncated almost exactly as in *P. griseolus*, to which species it possibly belongs, notwithstanding its larger size and the subapical black spots, which are wanting in *P. griseolus*.

BISALTES (to follow the genus *Ptericoptus*, p. 111).

Bisaltes, Thomson, Physis, ii. p. 110; Lacordaire, Gen. Col. ix. p. 606.

A genus hitherto found only in Tropical South America. Three species from Guiana have been described, but many others exist in collections from Peru and Bolivia.

1. **Bisaltes ——?**

Hab. PANAMA, Volcan de Chiriqui (*Champion*).

One example, not in good condition, agreeing with the description of *B. buquetii*, Thoms., but rather smaller, 12½ millim. instead of 15–16 millim., and having faint dusky vittæ on the thorax, which is apparently unicolorous in *B. buquetii*.

PARYSATIS (p. 112).

Parysatis flavescens (p. 112).

To the localities given, add:—GUATEMALA, Torola (*Champion*); PANAMA, Volcan de Chiriqui (*Champion*).

4. **Parysatis nivisparsa.**

P. rufitarsi affinis, differt elytris guttulis parvis albo-cinereo-tomentosis, undique sparsis. Castaneo-fusca fere nigra, nitida; pedibus antennisque castaneo-rufis, his articulis a 4° basi griseis; capite thoraceque interrupte cinereo-tomentosis, grossissime punctatis (thorace spatiis parvis lævibus); elytris lineatim punctulatis, apice transversim subsinuatim truncatis, angulo suturali obtuse producto, externo spinoso.

Long. 3¾–6½ lin.

Hab. PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

Of the same elongate form and chestnut-brown colour as *P. sulcata*, *P. mucronata*, *P. linearis*, *P. obtusa*, and *P. rufitarsis*, but differing from all of these species in the separation of the cinereous tomentum of the elytra into innumerable small, isolated spots.

5. **Parysatis fulvifrons.** (Tab. XXII. fig. 8.)

P. nivisparsæ affinis, differt fronte, vertici vittisque duabus latis thoracis, compacte fulvo-aurantiaco tomentosis. Plerumque major et latior, schistaceo-nigra nitida, elytris undique griseo-guttatis; thorace grosse

confluenter punctato, spatio dorsali sublævi; scutello cinereo-pubescenti; elytris apice obtusissime truncatis, punctulato-striatis, interstitiis interioribus convexis; corpore subtus nigro nitido, cinereo-marmorato; pedibus castaneo-rufis; antennis castaneo-fuscis, articulis a 4° basi cinereis.

Long. 5–9 lin. ♂ ♀.

Hab. PANAMA, Tolé, Bugaba (*Champion*).

6. **Parysatis illita.**

P. fulvifronti affinis, differt capite et thorace supra elytrisque (lateribus exceptis) rufo-castaneis, plagiatim fulvo-tomentosis, corpore toto subtus elytrisque lateribus nigris, griseo-pubescentibus; thorace et elytris sicut in *P. fulvifronti* punctatis, his apice valde obtuse truncatis; pedibus nigris, tarsis fulvis; antennis nigris, articulis a 4° basi cinereis.

Long. 5½–6 lin.

Hab. GUATEMALA, Pantaleon, Rio Maria Linda (*Champion*).

ATAXIA (to follow the genus *Parysatis*, p. 113).

Ataxia, Haldeman, Trans. Amer. Phil. Soc. x. p. 56 (1847); Lacordaire, Gen. Col. ix. p. 599.
Stenosoma, Leconte, Journ. Ac. Phil. ser. 2, ii. p. 158 (1852) (nec Mulsant).

There is little to distinguish the following genus, *Esthlogena*, from *Ataxia*; the only structural character which I can perceive is the sharp and rather elevated outer apical edge of the scape which distinguishes *Ataxia*, and in which it resembles *Parysatis*, differing in being unaccompanied by a narrow cicatrice.

One North-American species only has yet been described.

1. **Ataxia crypta.**

Lamia crypta, Say, Ins. of Louisiana, p. 5[1]; Leconte, Complete Writings of Thomas Say, i. p. 302.
Ataxia sordida, Haldeman, l. c.

Hab. NORTH AMERICA, Louisiana[1].—MEXICO, Almolonga (*Höge*).

Said by Erichson to be the *Saperda lineata* of Fabricius (Ent. Syst. ii. p. 314), and so registered in the Munich catalogue, but it does not agree with the description, which refers also, as Fabricius states, to a South-American (Brazilian?) insect in Lund's collection.

ESTHLOGENA (p. 113).

Esthlogena porosa (p. 113).

To the locality given, add:—MEXICO, Jalapa (*Höge*); PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

Esthlogena albisetosa (p. 113).

To the localities given, add:—GUATEMALA, Chacoj (*Champion*).

3. **Esthlogena guatemalena.**

E. porosæ affinissima, differt solum pronoto pectoreque lateribus (ut corpore supra) griseo-ochraceis, thoraceque disco nigro tricalloso.

Long. 4–9 lin. ♂ ♀.

Hab. GUATEMALA, Cerro Zunil 4000 to 5000 feet (*Champion*).

Underneath, the middle of the sterna only is black (like the abdomen), clothed with a very fine grey pile. In *E. porosa* the whole of the under surface, with the sides of the pronotum up to the lateral spines, is black. In *E. guatemalena* the scattered punctures of the under surface are larger and more numerous, giving the fine pile a spotted appearance. In both species the punctures scattered over the elytra are all black and shining, most of them forming circular foveæ.

4. **Esthlogena mirandilla.**

E. porosa multo angustior, thoracis spina laterali minuta. Valde elongata, angusta, supra castanea, pube densa subtilissima fulvo-ochracea vestita, vitta thoracis dorsali nuda vel grisea nitida, elytrorumque vitta angusta communi suturali grisea; capite thoraceque grosse sparsim punctatis, hoc elongato, fere cylindrico, tuberculo parvo utrinque laterali; elytris sicut in *E. porosa* et *E. guatemalena* disperse grosse punctatis, punctis nigris, apice oblique truncatis; corpore subtus medio nigro nitidissimo, lateribus aurantiaco-fulvis nigro-punctatis, segmento ultimo ventrali toto nigro griseo-pubescenti; antennis nigris, articulis a 5° basi griseis; pedibus nigris.

Long. 5–8 lin. ♂ ♀.

Hab. GUATEMALA, Cerro Zunil 4000 to 5000 feet, Mirandilla, El Tumbador (*Champion*).

EPECTASIS (p. 113).

Epectasis attenuata (p. 113).

To the localities given, add:—MEXICO, Cerro de Plumas (*Höge*); GUATEMALA, San Gerónimo, Mirandilla (*Champion*); PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

EUTELEUTA (to follow the genus *Epectasis*, p. 113).

Gen. *Atimuræ* affinis, sed corpore longiore elytrisque apice dilatatis truncatis angulisque productis, barbatis, &c. Corpus elongatum, lineare, tenuiter pubescens. Caput haud retractum, medio sulculatum, inter antennas depressum; oculi infra elongati; tubera antennifera apice penicillata. Antennæ corpori longitudine æquales, graciles, filiformes, subtus longe ciliatæ, scapo oblongo-clavato (quam in *Atimura* longiori et graciliori); articulis 3°–4^{m} elongatis longitudine æqualibus, cæteris gradatim et paullo decrescentibus, singulis quam 4^{us} fere dimidio brevioribus; 11° (♂) curvato, acuto, (♀) recto. Thorax cylindricus, inermis. Elytra linearia, apice paullo dilatata et late truncata; angulis exterioribus divaricatis, productis, barbatis, prope angulum suturalem depressis. Prosternum simpliciter arcuatum; coxæ exsertæ, acetabulis extus angulatis; mesosternum planum, modice declive, acetabulis anguste apertis. Abdomen segmento terminali apice lato, (♂) medio sinuato. Pedes sat breves, pilosi; tibiis intermediis extus paullo sinuatis ibique hirsutis, tibiis posticis extus arcuatis; tarsis robustis, articulo unguiculari elongato et modice incrassato, unguibus subparallelis.

This new genus is rendered necessary for the reception of a form allied to *Epectasis*, but rather broader and more robust and peculiar in the dilated apex of its elytra, the

external angles of which are penicillated. The only Central-American example I have seen as yet is a female, and I have been obliged to derive the differential male characters from an allied and hitherto undescribed species from South Brazil*.

1. **Euteleuta laticauda.** (Tab. XXII. fig. 9.)

Linearis, fulvescenti-fusca; elytris fascia indistincta anteapicali canescenti, angulis exterioribus apicalibus dense fusco-barbatis; antennis obscure rufescentibus, versus apicem fuscis, articulis 6°–11^{m} basi griseis (8° dimidio basali griseo); thorace indistincte fusco-lineato, sparsim punctulato; elytris striato-punctatis, prope suturam depressis, prope angulos exteriores apicales convexis et lævibus.

Long. 5½ lin. ♀.

Hab. PANAMA, Bugaba (*Champion*). One example only.

AMPHICNÆIA (p. 114).

Amphicnæia crustulata (p. 114).

To the locality given, add:—PANAMA, Volcan de Chiriqui (*Champion*).

3. **Amphicnæia quinquevittata.** (Tab. XXII. fig. 10.)

Nigra, thorace supra vittis tribus elytrisque vittis quinque (viz. una communi suturali longe ante apicem terminata, et duabus utrinque, una submarginali apicem suturalem attingente, altera mediana ante apicem abbreviata) cano-tomentosis, inter vittas medianam et dorsalem interdum vitta abbreviata grisea; capite linea inter antennas, fronte et lateribus, canescentibus; thorace cylindrico, basi angustato, dorso confertim punctulato; scutello cano-tomentoso; elytris usque ad apicem confertim sublineatim punctatis; pedibus nigris, interdum rufescentibus; tibiis intermediis versus apicem intus curvatis; tarsorum articulo unguiculari longissimo; antennis nigris, scapo rufo-castaneo.

Long. 2–2¾ lin.

Hab. GUATEMALA, Cubilguitz (*Champion*); PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

ALETRETIA (to follow the genus *Amphicnæia*, p. 114).

Aletretia, Bates, Contr. Ins. Faun. Amaz. Vall. Lamiaires, p. 204; Ann. & Mag. Nat. Hist. 3rd ser. xvii. (Jan. 1866).

Rosalba, Thomson, Syst. Ceramb. p. 108 (1864); ? Lacordaire, Gen. ix. p. 601.

The following species is congeneric with *A. inscripta*, from the Amazons, and agrees in all its generic characters with Lacordaire's description of *Rosalba*. The form of the elytra appears, however, to be different from that of the only described

* **Euteleuta fimbriata,** n. sp.

Linearis, ferrugineo-fusca; elytris apice fimbria e pilis marginatis angulis exterioribus fusco-barbatis; antennis obscure rufescentibus, articulo 8° dimidio basali, 9°–11^{m} basi griseis; capite antice longiori, mandibulis latis, robustis; thorace dorso inæquali; elytris striato-punctatis, prope suturam depressis, prope angulos exteriores convexis et lævibus.

Long. 5¼ lin. ♂.

Hab. S. BRAZIL (*coll. Bates*).

species of *Rosalba*, bearing very little resemblance to that of *Alcidion*, to which Thomson compares it, so that the two may be distinct, though nearly allied genera.

Aletretia and *Amphicnœia* have the greatly elongated claw-joint and sinuated middle of the outer edge of the middle tibiæ which distinguish the Hippopsini, but the form of the head is nearer that of the Ataxiini. They constitute, in fact, transition forms between the two groups.

1. **Aletretia pulchra.** (Tab. XXII. fig. 11.)

A. inscripta multo major, castaneo-fusca; thorace vittis quinque, elytris lineis plurimis versus basin et apicem fasciaque obliqua latiori mox post medium, ochraceis; thorace cylindrico, medio dorso convexo punctato, tuberculoque parvo laterali; elytris subcylindricis, apice oblique truncatis, angulo exteriori dentato, carina utrinque contra-basali valida sed obtusa, pone has depressis, crebre punctatis, dimidio apicali lævi; pedibus elongatis, tibiis intermediis extus medio sinuatis; tarsorum articulo unguiculari longissimo.

Long. $5\frac{1}{2}$ lin.

Hab. PANAMA, Bugaba (*Champion*).

ACESTRILLA (to follow the genus *Asyngenes*, p. 115).

Gen. *Asyngeni* affinis; differt inter alia oculis divisis, subtilius granulatis. Corpus minutum, undique longe setosum, politum nec tomento indutum. Caput inter antennas concavum; frons convexa; oculi subtenuiter granulati divisi, lobo inferiori rotundato, convexo. Thorax relative elongatus, cylindricus, mediocriter convexus, basi paullo constrictus, grosse confertim punctatus, spina brevi laterali post medium. Elytra anguste oblonga (thorace latiora), dorso antico depressa, apice rotundata. Prosternum antice mediocriter elongatum, inter coxas parum arcuatum, acetabula extus late angulata. Mesosternum subplanum, acetabula clausa. Pedes breves, sat tenues; tibiæ intermediæ medio longe sinuatæ. Tarsi breves et angusti, articulo unguiculari cæteris conjunctis subæquali, sed basi tenui; unguibus subdivergentibus.

Antennæ ♂ corpore dimidio longiores, filiformes undique longissime pilosi; scapus mediocris, gradatim clavatus, basi intus haud sinuatus; articulus 3^{us} quam 4^{us} paullo breviori, 4°–11^{m} subæqualibus vel parum decrescentibus.

A member of a numerous and difficult subgroup of small Lamiidæ allied to *Estola*, *Eupogonius*, and *Pogonocherus*, distinguished by the lateral armature of the thorax consisting of a short spine. It agrees with *Asyngenes* in the claws not being at right angles to the tarsi, but they are far from having the same form and position as in the Niphonini.

1. **Acestrilla minima.** (Tab. XXII. fig. 12.)

Nigra, nitida; elytris utrinque vitta latissima a basi usque ultra medium extensa, castaneo-rufa; corpore supra et subtus (lateribus) sat grosse sed discrete punctato; elytris medio punctis seriatis.

Long. $1\frac{1}{4}$ lin.

Hab. GUATEMALA, Panima in Vera Paz (*Champion*); PANAMA, Volcan de Chiriqui (*Champion*).

One of the smallest species of Longicornia known. In the single example from

Guatemala the reddish vitta of the elytra is broader and less clearly defined from the black ground-colour than in those from the State of Panama.

DESMIPHORA (p. 115).

Desmiphora cirrosa (p. 115).

To the localities given, add:—GUATEMALA, Yzabal (*Sallé*), Mirandilla (*Champion*); PANAMA, Volcan de Chiriqui (*Champion*).

Desmiphora mexicana (p. 116).

To the localities given, add:—MEXICO, Misantla, Cerro de Plumas (*Höge*); BRITISH HONDURAS, Belize (*Blancaneaux*); GUATEMALA, San Gerónimo, Volcan de Atitlan (*Champion*); PANAMA, near the city (*Champion*, *Boucard*).

6. **Desmiphora scapularis.**

D. ægrotæ affinis. Parva, cylindrica, rufescenti-fusca; thorace (vitta lata dorsali antice abbreviata atro-fusca excepta), humeris, plaga elytrorum anteapicali (gutta utrinque nuda atro-fusca excepta) corporeque subtus, cano-tomentosis; vertice penicillis duabus fuscis; thorace antice penicillis majoribus tribus canis (duabus posterioribus fuscescentibus); elytris basi fulvo-pilosis, versus apicem penicillis utrinque tribus canis; antennis rufis, scapo fusco, minus dense sed longe pilosis; pedibus testaceo-flavis, cano variegatis; elytris utrinque costa lata obliqua obtusa lævi, basi, sutura et lateribus punctatis.

Long. $3\frac{1}{2}$ lin.

Hab. PANAMA, David (*Champion*).

Nearest allied to *D. cirrosa*, which it resembles in the position of its hoary-white pubescence, but much smaller, and paler in colour.

7. **Desmiphora farinosa.** (Tab. XXII. fig. 13.)

Parva, cylindrica, rufo-testacea, albo-pubescens, longe pilosa, haud penicillata; capite, thoracis lateribus, corpore subtus, elytrisque lituris curvatis, densius albo-tomentosis; antennis quam corpus fere duplo longioribus, supra breviter subtus longius pilosis, scapo brevi, gracile ovato, articulis 3°–4^{m} sat elongatis, æqualibus, cæteris brevioribus, gradatim crescentibus; vertice elongato; thorace antice elevato, tuberculo laterali minuto, dorso nudo, polito punctato; elytris apice excepto confertim punctatis, nec costatis; antennis pedibusque pallidius rufo-testaceis.

Long. $3\frac{1}{3}$ lin.

Hab. PANAMA, Bugaba (*Champion*).

Belongs to *Desmiphora* rather than to *Pyrrhacita*, judging from the shorter antennal scape, but differs from both in the absence of the characteristic hair-tufts. The long erect hairs approach, however, on the vertex and the anterior margin of the thorax, the tufted form. The vertex is much longer, and the upper part of the eyes more distant from the thorax, and the antennæ more slender than in typical *Desmiphoræ*.

ATELODESMIS (p. 116).

2. **Atelodesmis piperita.**

Rufescens, ochraceo-tomentosa, supra disperse punctata et guttis nudis fuscis (partim confluentibus) irrorata; corpore subtus canescenti; antennis et pedibus testaceo-rufis, illis articulis 1°–4^{m} paullo minus dense quam in *A. unicolori* pilosis.

Long. 4 lin.

Hab. Mexico, Mirador (*Sallé*), Paso del Macho (*Höge*).

EUPOGONIUS (p. 117).

Eupogonius subæneus (p. 117).

To the localities given, add:—Mexico, Juquila (*Sallé*), Jalapa, Cordova, Paso del Macho (*Höge*); British Honduras, Belize (*Blancaneaux*); Guatemala, Cerro Zunil, Senahu, San Juan in Vera Paz, Volcan de Atitlan, Rio Maria Linda, Pantaleon (*Champion*).

Eupogonius longipilis (p. 117).

The localities of this species were accidentally omitted; the species was described from a Guatemalan example.

Hab. Mexico, Jalapa, Paso del Macho (*Höge*), Playa Vicente (*Sallé*); Guatemala, San Gerónimo, Chacoj (*Champion*).

5. **Eupogonius apicicornis.** (Tab. XXII. fig. 14.)

Parvus, subcylindricus, supra subplanatus, obscure æneo-fuscus, tomento ochraceo-fusco marmoratus pilisque erectis longis (apud antennas longissimis) obsitus; antennis articulis 10°–11^{m} flavis, 4° dimidio basali griseo; capite inter antennas perparum concavo, ochraceo, vertice fusco; thorace cylindrico, spina acuta laterali, dorso confertim punctulato, ochraceo-fusco, vitta lata dorsali nigro-fusca; scutello et regione scutellari nigro-fuscis; elytris minus confertim irregulariter punctatis, castaneo-fuscis, tomento ochraceo-fusco plus minusve confluenter maculatis et lineatis; antennis quam corpus longioribus, scapo gradatim clavato, articulis 3°–4^{m} elongatis, 5°–11^{m} brevibus.

Long. $1\frac{3}{4}$–$2\frac{1}{4}$ lin.

Hab. Guatemala, Pantaleon, El Reposo, Volcan de Atitlan (*Champion*); Panama, Bugaba, David (*Champion*).

Many examples; same habits as *Parysatis* and *Esthlogena*.

6. **Eupogonius scutellaris.**

E. apicicorni proxime affinis et similis, differt scutello dense griseo-albo pubescente, thoraceque haud vittato, etc.

Parvus, subæneo-niger, longissime erecte pilosus; antennis articulis 10°–11^{m} flavis, 4° dimidio basali griseo; capite thoraceque subtiliter sericeo-griseo pubescentibus, concoloribus; scutello griseo-albo; elytris griseo-fuscis submaculatis.

Long. 2 lin.

Hab. Panama, Bugaba (*Champion*).

One example only.

7. **Eupogonius subnudus.**

Oblongus, robustior, cupreo-fuscus, nitidus, erecte pilosus, parciter submaculatim cano-griseo tomentosus; corpore supra sat confertim punctato; thoracis tuberculo laterali conico, acuto; antennis articulis a 5° basi cano-griseis.

Long. $3\frac{1}{2}$ lin.

Hab. GUATEMALA, Volcan de Atitlan (*Champion*).

Of broader and rather more ovate form than *E. subæneus*, the upper surface with very little light-coloured tomentum, and on the elytra only, the head and thorax being bare. As in all the other known *Eupogonii*, the third and fourth antennal joints are elongated and the fifth to the eleventh much shorter.

8. **Eupogonius major.**

Major elytrisque relative longioribus, gen. *Esthlogenæ* similis. Elongatus, cuprescenti-fuscus, maculatim parciter ochraceo-fusco tomentosus et erecte pilosus; antennarum articulis a 5° basi griseis; capite et thorace disperse punctatis, hoc brevi, transverso, tuberculo valido acuto laterali; elytris minus valde, versus basin confuse et confertim deinde sublineatim, punctatis.

Long. 4–5 lin.

Hab. MEXICO, Paso del Macho (*Höge*); GUATEMALA, near the city, Panajachel, San Gerónimo, Cerro Zunil (*Champion*).

Coloured like *E. subæneus*, and likely to be taken for very large examples of that species; but the thoracic spine is longer and broader at the base, the thorax relatively shorter and broader, and the elytra longer.

9. **Eupogonius vittipennis.** (Tab. XXII. fig. 15.)

E. flavocincto affinis et similis. Oblongo-linearis, nigro-castaneus, nitidus, erecte pilosus; thorace vitta utrinque laterali, elytris sutura et utrinque vittis duabus (altera marginali altera dorsali nec apicem nec suturam attingente) ochraceis; capite crebre punctato, oculis flavo-marginatis; thorace cylindrico, spina parva acuta laterali, disco confertissime punctato; elytris usque ad apicem sat confertim punctatis; antennis crassis, densissime et longissime nigro-pilosis, articulis 5°–11^{m} brevissimis.

Long. $2\frac{1}{2}$ lin.

Hab. GUATEMALA, Teleman in the Polochic valley (*Champion*).

Several examples.

10. **Eupogonius lætus.**

Oblongo-linearis, vix convexus, undique griseo-hirtus, cano-griseo tomentosus; thoracis vittis quatuor elytrisque lineis subsuturali et laterali et lineolis discoidalibus quatuor (duabus parallelis ante duabusque post medium) plerumque plus minusve confluentibus, nigris; macula utrinque laterali thoracis interdum rosea; antennis quam corpus longioribus, piceis, articulis 5°–11^{m} mediocriter abbreviatis; thorace breviter cylindrico, lateribus medio angulatis haud spinosis, dorso et elytris totis confertim punctatis; pedibus pallide testaceis, femoribus, tibiis tarsisque fuscis.

Long. 2–$2\frac{1}{2}$ lin.

Hab. GUATEMALA, Cerro Zunil, Panajachel, Volcan de Atitlan (*Champion*).

Many examples.

The thorax is simply angulated in the middle of the sides as in *E. flavocinctus*. The antennal joints 5–11 are not so strongly abbreviated as in the typical *Eupogonii*; they are, however, all singly very much shorter than either the third or the fourth, which proportion constitutes one of the chief characters of the genus.

11. **Eupogonius comus.**

Anguste oblongus, undique densissime griseo-hirsutus; elytris rufescentibus, maculis magnis plurimis nigris quarum una triangulari circumscutellari; thorace tuberculo laterali parvo, acuto; elytris apice obtuse oblique truncatis, dorso nitidis, lineatim punctulatis; antennis nigris, articulo 4° dimidio basali, 8° et 9° toto, griseis.

Long. $4\frac{1}{2}$ lin. ♂.

Hab. MEXICO, Juquila (*Sallé*). One example only.

The first to the fourth antennal joints are densely clothed with long hairs all round, the fifth to the eleventh are ciliated beneath only. The species therefore approaches very nearly the genus *Atelodesmis*, from which it differs in the slender form of the third and fourth joints. *Eupogonius ursulus* has antennæ similarly clothed, but with the shortened fifth to eleventh joints somewhat dilated on one side.

12. **Eupogonius ——?**

Hab. GUATEMALA, Chacoj (*Champion*).

A single imperfect specimen, not in a condition to describe, evidently belonging to this genus, having simple middle tibiæ and hairy body and antennæ.

UNELCUS (to follow the genus *Eupogonius*, p. 118).

Unelcus, Thomson, Syst. Ceramb. p. 109 (1864); Lacordaire, Gen. Col. ix. p. 627.

Five species of this genus have been described, all tropical South-American. It is distinguished from *Eupogonius* (with which it agrees in the long erect hairs which clothe the body and limbs, and in the simple middle tibiæ) by the head being rather deeply concave between the antennæ, the joints of the latter from the third gradually diminishing in length, and by the lower lobe of the eyes being elongated.

1. **Unelcus lineatus.** (Tab. XXII. fig. 16.)

Subcylindricus, castaneo-fuscus, longe pilosus, subtus pallide ochraceo-tomentosus, supra castaneus; thorace vittis tribus elytrisque utrinque vittis quatuor et margine laterali late, albo-ochraceo tomentosis (vel albo-ochraceis, sutura et utrinque vittis quatuor castaneis nudis nitidis); antennis quam corpus dimidio longioribus, sat robuste filiformibus, castaneo-fuscis.

Long. 4 lin.

Hab. MEXICO, Toxpam (*Sallé*); GUATEMALA, San Juan in Vera Paz (*Champion*).

DILIOLOPHUS (to precede the group Pogonocherini, p. 118).

Quoad characteres systematicos ad "Groupe *Apodasyides*" (Lacord.) pertinet, sed corpore haud piloso. Corpus sat breviter oblongo-cylindricum, subtiliter tomentosum. Caput exsertum, inter oculos latum, vix concavum, fronte breviter quadrata, planata; oculi subtiliter granulati, lobo inferiore subquadrato. Antennæ corpore (♂) vix longiores, robuste filiformes, subtus sparsim ciliatæ, scapo oblongo-conico, articulis 3°–4^{m} mediocriter elongatis, 5°–11^{m} brevioribus, 11° acuto. Thorax cylindricus, tuberculo (vel spina) mediano laterali, acuto. Elytra ante apicem declivia, apice rotundata, tuberculo utrinque centro-basali validissimo, conico, nitido. Pedes sat elongati, brevissime setosi; tibiæ intermediæ elongatæ, simplices; tarsi lati, robusti, unguibus divaricatis. Prosternum arcuatum (capite valde distanti), acetabulis extus angulatis; mesosternum declive, acetabulis apertis.

The species on which this genus is founded has the ordinary appearance of a small *Monohammus*; but its structural characters are the same as those of the group "Apodasyides" of Lacordaire. It has probably a real affinity with *Eupogonius* and its allies, though destitute of the long hairs which clothe the body and antennæ of nearly all the members of the group.

1. **Diliolophus vexator.** (Tab. XXII. fig. 17.)

Tomento subtili cinereo-fusco vestitus, subnitidus; elytris pone medium lineolis numerosis transversis contiguis fasciam latam fere efficientibus, nigris nudis; antennis rufescenti-fuscis, articulo 4° basi pallidiori; capite et thorace sparsim punctatis, hoc disco inæqualiter subtuberculato; elytris grossius, postice striatis, punctatis, tuberculo centro-basali nigro nitido.

Long. 4½–6 lin.

Hab. Guatemala, San Gerónimo, Purula (*Champion*).

ESTOLA (p. 118).

Dr. Horn has remarked, with regard to the Californian *Estola* (?) *sordida*, that it differs from Lacordaire's definition of *Estola*, and probably does not belong to that genus. This is quite true; it forms with *E. perforata* and the three species presently to be described, viz. *E. fulvitarsis*, *E. prolongata*, and *E. leucosticta*, a distinct group differing from Lacordaire's *Estola* in the broad and short lower lobe of the eyes and gradually sloping mesosternum; the granulation of the eyes and form of the scape offer no essential difference. But the form of the lower lobe of the eyes and of the mesosternum is not constant, but varies gradually in the score or so of South-American *Estolæ* which I have examined. Still there remains sufficient difference to distinguish the *E. sordida* group. It remains to be seen to which group the original *Estola* of Fairmaire is to be referred.

Estola perforata (p. 118).

To the localities given, add:—Mexico, Toxpam (*Sallé*), Jalapa, Cerro de Plumas (*Höge*); Guatemala, Coatepeque, Pantaleon, Mirandilla, El Reposo, San Isidro, Las

Mercedes, Volcan de Atitlan, Cerro Zunil, El Tumbador, Rio Maria Linda, San Gerónimo, Cahabon, Cubilguitz, Chiacam, Chacoj (*Champion*); PANAMA, David, San Feliz, Volcan de Chiriqui, Bugaba (*Champion*).

A widely distributed and abundant species throughout our region.

1 (A). **Estola fulvitarsis.**

E. perforatæ proxime affinis et simillima, forsan ejus varietas; differt colore supra lætius fulvo, maculisque elytrorum numerosis punctatis fusco-nigris; tarsis melleo-fulvis; scutello sicut in *E. perforata* fulvo-pubescente.

Long. $4\frac{1}{2}$–6 lin. ♂ ♀.

Hab. PANAMA, Volcan de Chiriqui, Caldera (*Champion*).

Of the same form as *E. perforata*, and of the same uniform greyish-black colour beneath, but the upper surface of a lighter yellowish-brown hue, and the elytra sprinkled with large blackish-brown punctures, in the centre of each of which is a puncture larger than the other punctures. In this latter peculiarity it resembles *Esthlogena porosa*, but with the difference that the elytra are faintly punctate-striate, with many small punctures besides the larger black ones. Some examples of the typical *E. perforata* from Chontales have nearly the same elytral sculpture, and these are only to be distinguished from *E. fulvitarsis* by the black tarsi.

Estola ignobilis (p. 118).

To the localities given, add:—MEXICO, Jalapa, Cordova, Paso del Macho (*Höge*), Oaxaca (*Sallé*); BRITISH HONDURAS, Belize, Rio Hondo (*Blancaneaux*); GUATEMALA, Panzos, Las Mercedes (*Champion*); COSTA RICA, Cache (*Rogers*); PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

Estola vittulata (p. 118).

To the localities given, add:—MEXICO, Jalapa (*Höge*); GUATEMALA, Cerro Zunil, Chacoj (*Champion*); PANAMA, Bugaba (*Champion*).

5. **Estola prolongata.**

E. perforatæ similis, sed multo angustior, elytris confertim striato-punctatis, etc. Angusta, elongata, tomento fulvo-fusco vestita, elytris fusco-nigro punctatis, subtus nigra, subtiliter fulvo-ochraceo pubescens, medio pectore nigro, glabro; fronte sicut in *E. perforata* brevi, oculorumque lobo inferiori magno et lato; thorace angustiori, spina laterali tenuiori, acutissima, dorso grosse punctato, spatiis lævibus; scutello fulvo-fusco; elytris elongatis, subparallelis, apice singulatim rotundatis, confertissime usque ad basin lineatim punctatis; mesosterno fere plano.

Long. $4\frac{1}{2}$ lin.

Hab. PANAMA, Volcan de Chiriqui (*Champion*).

Two examples.

6. **Estola leucosticta.**

E. perforatæ quoad formam et sculpturam simillima, sed angustior, elytrisque guttis parvis numerosissimis sublineatim digestis albis. Angusta, sublinearis, ferreo-nigra, subtilissime griseo-pubescens, nitida; capite thoraceque grossissime punctatis spatiis lævibus, tuberculo laterali valido, acuto; scutello nigro; elytris apice rotundatis, sat regulariter substriatim punctatis, guttis numerosissimis, inter puncta, griseo-albis; antennis nigris, articulis a 5° basi anguste griseis; mesosterno declivi, subconcavo.

Long. $5\frac{1}{2}$ lin. ♂.

Hab. MEXICO, Jalapa (*Flohr in coll. Bates*).

One example only.

Bears the same relation to *Esthlogena albisetosa* as *Estola perforata* does to *Esthlogena porosa*.

7. **Estola misella.**

Oblonga, obscure fusca, dense suberecte setosa, griseo vel obscure fusco-griseo incumbenti pubescens, postice plus minusve griseo marmorata; antennis subtus parce ciliatis, articulis 2°–4^{m}, 6°–7^{m} et 9° basi (2° et 3° interdum fere toto), 6°, 8° et 10° dimidio basali (8° interdum toto) griseo-testaceis, articulo 3° quam 4^{us} dimidio breviori; thorace sat confertim punctato, spina brevi submediana laterali; elytris apice brevissime et obtuse truncatis, lineatim (versus apicem sparse) punctatis; oculis lobo inferiori subelongato; mesosterno paullo elevato sed antice verticaliter declivi; capite subretractili.

Long. $2\frac{1}{2}$–$3\frac{1}{2}$ lin. ♂ ♀.

Hab. BRITISH HONDURAS, Rio Hondo (*Blancaneaux*); GUATEMALA, Panzos, Teleman (*Champion*); PANAMA, Bugaba, David (*Champion*).

Connects *Estola* (*sensu* Lacordaire) with *Atimiola*, having the short third antennal joint of the latter and the narrow lower lobe of the eyes and vertical anterior face of the mesosternum of the former.

PARESTOLA (p. 119).

Parestola zapotensis (p. 119).

To the locality given, add:—GUATEMALA, Cerro Zunil, Chacoj, Senahu, San Juan in Vera Paz (*Champion*); PANAMA, Volcan de Chiriqui (*Champion*).

ATIMIOLA (p. 119).

Atimiola guttulata (p. 120).

To the locality given, add:—BRITISH HONDURAS, Belize (*Blancaneaux*).

EUPROMERA (to follow the genus *Atimiola*, p. 120).

Eupromera, Westwood, Trans. Ent. Soc. iv. p. 224; Lacordaire, Gen. Col. vol. ix. p. 648.

A genus hitherto recorded only from South Brazil. Two species have been described.

1. **Eupromera glabricula.** (Tab. XXII. fig. 18.)

Anguste oblonga, absque tuberculis et penicillis, fulvo-ochracea, nigro-fusco plagiata vel maculata (elytris notulis canescentibus), capite thoracisque disco pedibusque anticis, fere toto nigro-fuscis ; antennis articulis 1°–4^{m} carneo-testaceis, 1° et 3° apice nigris, 5°–11^{m} toto nigris ; capite thoraceque confertissime subalveolato-punctatis, elytris (dorso depressis) sat crebre, medio disco et lateribus lineatim (ibique tenuiter costulatis), punctatis.

Femora antica multo magis quam in *E. spryana* dilatata, supra arcuata, infra valde angulata.

Long. $1\frac{1}{3}$–$1\frac{2}{3}$ lin.

Hab. PANAMA, Bugaba (*Champion*).

Many examples ; all with similarly-dilated anterior femora.

ALLŒOSCELIS (to precede the genus *Poliœnus*, p. 120).

Corpus sublineare, parum convexum, haud setosum. Caput latum, inter antennas haud concavum, fronte brevissima, fere plana ; oculi maximi grosse granulati, supra parum distantes, lobis inferioribus magnis, rotundatis. Antennæ corpore dimidio longiores, setaceæ, subtus parce ciliatæ, scapo sicut in *Estolis* obconico basi intus emarginato, sed paullo graciliori, articulis 3°–9^{m} fere æqualibus. Thorax brevis, inermis, lateribus medio subangulatim rotundatis. Elytra postice leviter attenuata, apice breviter obtusissime truncata, basi tuberibus utrinque elongatis obtusis, cætera superficie vix inæquali. Pedes sat elongati ; femora subclavata ; tibiæ intermediæ extus sinuatæ et tuberculatæ, posteriores (♂?) incrassatæ sed lineares, undique densissime breviter setosæ, basi intus angustatæ ; tarsi sat breves, articulo unguiculari elongato, unguibus divaricatis, inermibus. Prosternum ante coxas brevissimum, inter coxas alte arcuatum, acetabulis extus angulatis ; mesosternum quadratum leviter arcuatum, acetabulis extus fere clausis.

Not closely allied to any genus of Lamiidæ known to me, but apparently belonging to the great group "Pogonocherini" (including the "Estolides" and "Pogonocherides" of Lacordaire).

1. **Allœoscelis leptis.**

Nigro-fusca, pube tenui incumbenti obscure grisea vestita, apud elytra postice signaturis nonnullis canis variegata ; femoribus posticis antennisque rufescentibus, his articulis basi anguste griseis ; corpore subtus sat confertim (postice sparsius) confuse punctatis.

Long. $3\frac{1}{2}$ lin.

Hab. PANAMA, Volcan de Chiriqui (*Champion*).

POLIÆNUS (p. 120).

2. **Poliœnus hircinus.**

P. hirsuto multo minor et differt thorace inermi, etc. Parvus, ochraceo-griseo tomentosus, elytris nigro-setosis, antennis et pedibus pilis longissimis griseis ; antennis pallidis, articulis apice fuscis, scapo minus quam in *P. hirsuto* elongato sed quam in *Pogonocheris* multo longiori, articulo 3° quam scapus vix longiori, quam art. 4^{us} dimidio breviori, articulis 5°–11^{m} brevibus ; thorace subcylindrico, basi angustato, lateribus inermibus, dorso tuberculis compressis duobus apice penicillatis ; elytris, præcipue postice, convexis, apice oblique truncatis, parciter aspere granulato-punctatis, dorso posteriori utrinque costato, lateribus altis verticalibus indistincte costulatis ; crista utrinque centro-basali parva ; subtus niger griseo-pubescens ; tibiis intermediis simplicibus.

Long. $2\frac{1}{2}$ lin.

Hab. MEXICO, Jalapa (*Höge*). One example.

This small species looks like a dwarf individual of *P. hirsutus*, but it presents structural differences which in any other Coleopterous family than the Longicornia would be considered generic. The thorax is destitute of the large conical lateral tubercle of *P. hirsutus*, the antennal scape is relatively shorter, and the relative proportion of the third and fourth joints reversed.

SARILLUS (to follow the genus *Policenus*, p. 120).

Gen. *Policeno* affinis; differt *inter alia* thoracis lateribus acute spinosis antennarumque articulo 3° scapi dimidio haud longiori. Corpus minimum, oblongum, longè pilosum. Caput inter antennas concavum; frons late quadrata nec infra angustata; tubera antennifera elevata; oculi supra approximati, infra haud elongati subtransversi. Antennæ filiformes, scapo elongato versus basin æqualiter angustato, articulo 3° scapi dimidio æquali, 4° quam 3^us^ fere duplo longiori, cæteris gradatim decrescentibus. Thorax subcylindricus, antice et postice transversim subsulcatus, spina submediana basi lata. Elytra oblonga, apice conjunctim rotundata, medio dorso depresso, lateribus verticalibus; nigro-penicillata et rigide setosa. Pedes robusti; femora valde clavata, pedunculata; tibiæ intermediæ extus prope apicem profunde sinuatæ; tarsi breves. Acetabula antica extus brevissime et angustissime angulata; intermedia fere clausa.

The very small species which constitutes this genus would no doubt be included, on account of the near approach to closure of the middle haunch-sockets, by Lacordaire in Division II. of his "Acanthocinides." This character, however, exhibits such fine gradations in the allied forms, and is of such unsatisfactory application, that I think most of Lacordaire's Division II. will eventually be referred to the "Pogonocherini."

1. **Sarillus pygmæus.** (Tab. XXII. fig. 19.)

Tomento ochraceo-fusco vestitus, cano-griseo nigroque variegatus; pedibus et antennis rufescentibus, scapo nigro maculato, articulis 5°–11^m^ apice nigris; thorace et elytris setis elongatis rigidis nigris haud dense obsitis; elytris lateribus, antennis pedibusque griseo-setosis; elytris fasciculis 4 nigris, linea ante medium obliqua, fasciaque prope apicem lata obliqua fusco-marginata, vel area apicali tota, cinereis.

Var. Elytrorum fasciis cinereis obsoletis.

Long. $1\frac{1}{2}$–2 lin.

Hab. PANAMA, David, Bugaba (*Champion*).

Many examples.

ECTENEOLUS (to follow the genus *Sarillus*).

Gen. *Colobure* affinis. Corpus (præcipue elytris) valde elongatum, nec setosum. Caput inter antennas subconcavum, infra subretractile; frons brevis convexa, infra angustata; tubera antennifera oblique elevata; oculi grosse granulati, lobo inferiori lato rotundato. Antennæ (♀) corpore multo breviores, infra sparsim ciliatæ, articulis 3°–11^m^ gradatim decrescentibus. Thorax angustus, cylindricus, post medium tuberculo laterali lato conico. Elytra oblongo-linearia, apice brevissime obtuse truncata, prope suturam paullulum depressa. Mesosternum fere planum. Acetabula antica extus late, intermedia anguste, aperta. Femora elongato-clavata; tibiæ intermediæ extus breviter sinuatæ. Tarsi mediocres.

I find the anterior and middle acetabula in *Colobura*, which Lacordaire places in his "Pogonocherides," open externally. In this character, as well as in the antennæ and

elongated elytra, the present genus approaches it closely. It differs in the thorax being unarmed on the disc and furnished with a lateral tubercle, and in the elytra being without dorsal carina, &c.

1. **Ecteneolus flohri.**

Obscure fuscus, elytris griseis fasciis duabus valde undulatis (vel submacularibus) approximatis post-medianis, obscure fuscis; thorace confertim, elytris sparsim irregulariter, punctatis; antennis fusco-rufis, articulis a 3° basi carneo-griseis.

Long. 6 lin.

Hab. MEXICO, near the city (*Flohr in coll. Bates*).

POGONILLUS (to follow the genus *Ecteneolus*).

Gen. *Rhopaloscelidi* (Blessig) affinis, a quo differt inter alia thorace inermi. Corpus oblongum undique erecte pilosum. Caput inter antennas parum concavum, fronte lata et brevi; oculi infra subquadrati. Antennæ filiformes, corpore longiores, scapo sat brevi, oblongo-ovato basi angustato, articulo 3° quam 4^{us} paullo breviori, quam scapus parum longiori, 5^{o}–11^{m} gradatim decrescentibus. Thorax rotundato-quadratus, basi subconstrictus, medio dorso convexo. Elytra apice rotundata, dorso parum convexo, æquali, tuberculo centro-basali elongato parum elevato. Femora ♂ sat crasse elongato-clavata; tibiæ intermediæ simplices (vel sinu inconspicuo). Acetabula antica extus late angulata, intermedia aperta; sterna inter pedes arcuata; prosternum ante coxas breve sed vix concavum, capite parum retractili.

A genus undoubtedly allied closely to *Rhopaloscelis* and *Pogonocherus*, but partaking of the chief group characters of the "Estolides," from which latter series of genera it is chiefly distinguished by the simple outer edge (or rather the apparent absence of notch) of the middle tibiæ. In the male the elytra are rather more narrowed towards the apex, the femora more strongly clavated, and the disc of the thorax more convex than in the female.

1. **Pogonillus inermis.**

Tomento griseo-ochraceo vestitus et griseo pilosus; elytris utrinque fascia (intus abbreviata) longe post medium maculisque duabus (interdum conjunctis) ante apicem, nigro-fuscis; antennis fusco-nigris, articulis 4^{o}–5^{m} dimidio basali, 6^{o}–7^{m} basi, griseis; thorace et elytris valde disperse punctulatis; pedibus rufo-testaceis, tibiis apice tarsisque nigro-fuscis.

Long. $3\frac{1}{4}$ lin. ♂ ♀.

Hab. MEXICO, Cordova (*Sallé*), Jalapa (*Höge*).

2. **Pogonillus subfasciatus.** (Tab. XXII. fig. 20.)

Magis oblongus (♂) postice minus angustatus; tomento griseo-ochraceo vestitus et longe pilosus; elytris utrinque maculis marginalibus, guttis plurimis maculisque transversis fasciæformibus duabus post medium, nigro-fuscis; antennis nigris, articulis 1° et 2° totis, 3° et 4° dimidio basali, 5^{o}–7^{m} basi, testaceis; pedibus nigris, femoribus apice tibiisque (apicibus nigris exceptis) testaceis; thorace valde disperse, elytris hic illic lineatim, punctulatis.

Long. $2\frac{1}{2}$ lin. ♂.

Hab. GUATEMALA, Panzos (*Champion*).

TESSARECPHORA (to precede the genus *Ærenea*, p. 121).

Tessarecphora, Thomson, Archives Entom. i. p. 77 ; Lacord. Gen. Col. ix. p. 661.

The following is the sole species described of this genus, hitherto recorded only from Tropical South America.

1. **Tessarecphora arachnoides.**

Tessarecphora arachnoides, Thomson, Archives Entom. i. p. 77, t. 9. f. 10 *a*, *b* [1].

Hab. GUATEMALA, San Isidro (*Champion*) ; SOUTH AMERICA, Cayenne, Amazons, Brazil [1].

ÆRENEA (p. 121).

Ærenea impetiginosa (p. 121).

To the localities given, add:—GUATEMALA, Cerro Zunil, Pantaleon, Mirandilla, Rio Maria Linda, Volcan de Atitlan ; PANAMA, Bugaba, Tolé (*Champion*).

PENESSADA (to follow the genus *Ærenea*, p. 121).

Penessada, Thomson, Physis, ii. p. 97 ; Lacordaire, Gen. Col. ix. p. 664.

One species only of this genus has been described as yet, from Brazil ; we now add three others from Central America.

1. **Penessada fuliginea.**

Elongato-ovata, fusco-nigra, scutello ochraceo-pubescens elytrisque dimidio postico fulvo-ochraceo maculato vel variegato ; capite quam in gen. *Ærenea* multo minore angustioreque, confertim punctato, inter antennas concavo, fronte brevi infra paullo angustata, tuberibus antenniferis oblique elevatis ; thorace subquadrato, basi angustato, tuberculo postmediano acuto, dorso plus minusve distincte tricalloso, scabroso-punctato ; elytris versus apicem gradatim angustatis, apice rotundatis, confertim punctatis, postice striatis interstitiisque convexis, tuberculo centro-basali paullo elevato ; antennis articulis basi anguste testaceis, scapo oblongo-ovato, basi intus subito angustato ; pedibus sat gracilibus, femoribus gradatim clavatis, tibiis intermediis simplicibus ; tarsis articulo unguiculari elongato, unguibus subparallelis ; mesosterno arcuato simplici. Palpi articulo terminali ovato oblique truncato.

Long. $3\frac{1}{4}$–4 lin. ♂ ♀.

Hab. GUATEMALA, Cerro Zunil, Panajachel (*Champion*).

Resembles, in general appearance, the genus *Alphus* or *Leptostylus* much more than *Ærenea*, to which it is really allied in structure. The claws are not so closely parallel, nor the claw-joints so thick, as in the "Niphonini" and "Apomecynini," and they vary in degree of divergence in one and the same individual. Its characters bring it within the definition of the genus *Penessada*.

2. **Penessada albosignata.** (Tab. XXII. fig. 21.)

Oblongo-ovata, castaneo-rufa, glabra ; scutello elytrorumque fascia (utrinque abbreviata) prope apicem cano-

tomentosis, corpore supra undique confertissime subconfluenter punctato; antennis articulis 5°–11^{m} basi anguste canis, 11° apice appendiculato; unguibus longis, subdivergentibus.

Long. $4\frac{1}{4}$ lin.

Hab. GUATEMALA, Cerro Zunil (*Champion*).

One example only.

Agrees in generic characters with the preceding species; the middle tibiæ having the groove on their outer edge concealed by an even fringe of short hairs, and the long sharp claws being rather less approximated and subparallel than in *Ærenea*.

3. **Penessada (?) asperata.**

Precedentibus magis elongata capiteque latiori. Obscure fulvescenti-fusca, fusco obscuriori nebulosa, setis incumbentibus albis undique sparsim obsita; capite (præcipue inter antennas) lato, vertice et occipite linea profunda impressis; thorace subquadrato, tuberculo laterali valido, acuto, dorso inæquali, tricalloso, cum capite grosse sparsim punctato; elytris elongato-ovatis, postice gradatim angustatis et leniter declivibus, confuse punctatis, punctis minoribus majoribusque intermixtis, basi granulato-asperatis, apice singulatim rotundatis; corpore subtus nigro nitido; tibiis intermediis prope apicem distincte sinuatis; antennis scapo crassius oblongo-clavato basi intus subito angustato, articulis apice (6°–11^{m} basi et apice) anguste griseis.

Long. 5–6 lin.

Hab. MEXICO, Jalapa (*Höge*).

Two examples.

The difference in the width of the head and its less deep concavity between the antennæ, the sinuation of the middle tibiæ and the thicker (almost tumid) scape, almost warrant the generic separation of this species from the two preceding. It agrees with them, however, in other important generic characters, and may be nearer the type species of *Penessada* (which I know only from description) than the other two. The claws are less long and sharp, and decidedly more approximated.

Group **PHACELLINI** (to precede the Group Onciderini, p. 121).

EURYCALLINUS.

Corpus breviter ovatum, convexum, subtiliter incumbenti-pubescens, parcissime setosum. Caput sicut in gen. *Phacello*, inter antennas concavum, fronte quadrata; mandibulæ validæ apice latæ, scalpriformes; palpi articulo terminali ovato; oculi subtiliter granulati; antennæ filiformes, ♂ corpore fere duplo longiores, subtus parce ciliatæ; scapo valde elongato gradatim clavato, articulo 3° quam scapus vix longiori, 4°–11^{m} perparum brevioribus, subæqualibus. Thorax relative parvus, antice et postice sulcato-depressus, tuberculo laterali mediano valido, conico, apice acuto. Elytra trigono-subovata, humeris prominentibus, subhamatis, tuberculoque utrinque conico centro-basali; apice angusta, sinuato-truncata, angulo exteriori valde producto, suturali subacuto. Prosternum apice minus quam in gen. *Brachychilo* productum; mesosternum elevatum, apice paullo productum, verticale. Pedes sat elongati, tibiæ intermediæ extus simplices.

A genus intermediate in its characters between *Phacellus* and *Brachychilus*, the only other known members of this distinct group. The sternum and acetabula are constructed as in those genera.

1. **Eurycallinus mirabilis.** (Tab. XXII. fig. 22.)

Ochraceo-fuscus incumbenti-pubescens, elytris linea obliqua utrinque ab humero fere usque ad suturam, fascia angusta recta pone medium lituraque flexuosa utrinque prope apicem, ochraceo-albo tomentosis; capite thoraceque impunctatis; elytris profunde striato-punctatis, versus apicem punctis confusis.
Long. 3–4½ lin. ♂ ♀.

Hab. Mexico, Cordova (*Sallé*), Jalapa (*Höge*).

There is little or no sexual difference in the anterior tarsi, and very little in the length of the antennæ.

Group **CYRTININI** (to follow the Group Phacellini).

OMOSAROTES.

Omosarotes, Pascoe, Journ. of Entom. i. p. 131; Bates, Ann. & Mag. N. H. ser. 3, xvii. p. 194; Lacordaire, Gen. Col. ix. p. 820.

The unique species on which this remarkable genus is founded has hitherto been met with only in the Amazons region.

1. **Omosarotes singularis.**

Omosarotes singularis, Pascoe, l. c. t. 8. f. 5.

Hab. Panama, Divala (*Champion*).

One example.

Agrees closely with examples from the Amazons, with which I have compared it.

MYRMOLAMIA.

Gen. *Cyrtino* (Leconte) affinis, differt elytrorum humeris rectangulatis apice obtusis. Corpus minutum, glabrum, breviter oblongum, angustum. Caput latum inter antennas planum; oculi parvi, divisi; palpi apice tenuiter acuminati. Antennæ filiformes, subtus setis nonnullis valde elongatis; scapo valde elongato, gradatim graciliter clavato, arcuato; articulis 3°–11^m^ multo brevioribus, gradatim sed parum decrescentibus. Thorax inermis, cylindricus postice angustatus et valde depresso-sulcatus, vel cyathiformis dorso anteriori valde convexo. Elytra basi depressa; postice modiocriter convexa, tuberculo valido compresso utrinque centrobasali. Femora pedunculata et fortiter clavata; tibiæ intermediæ extus sinuatæ. Ungues subdivergentes.

Separated from the North-American genus *Cyrtinus* with much hesitation, as it agrees with Leconte's description of that genus (Smithson. Contr. 265, pt. ii. p. 333) pretty closely in all respects except the "elytra with rounded humeri," the shoulders being as rectangular as *e. g.* in *Pogonocherus mixtus*, Hald. The elytra, however, widen a little posteriorly: they are gradually declivous behind, and jointly subacuminate-rotundate at the apex; they are not "very convex," nor can the centro-basal tubercle be called "a large acute spine," which Leconte attributes to *Cyrtinus*.

The position of *Cyrtinus* and its allied genera in the Lamiidæ series of forms is very doubtful. Lacordaire placed the group after the "Exocentrini" division of the "Acanthocinini," from which alliance Leconte widely removed them, making them a distinct tribe, not far removed from the "Moneilemini." The question cannot be satisfactorily determined in the absence of connecting forms, graduating in the direction of one or other of the great groups of Lamiidæ, of which they may be eccentric developments. The subparallel position of the tarsal claws is mentioned by Leconte in speaking of *Cyrtinus*, but he says the claws appear to be movable, and are sometimes divaricate. I have already remarked on the similar variability of position of the claws in speaking of *Parmena villosa* and *Penessada fuliginea*.

The Myrmolamiæ resemble ants of similar size and colours. They also have a strong analogical resemblance to *Euderces* and *Tillomorpha* of the family Cerambycidæ.

1. **Myrmolamia opacicollis.** (Tab. XXII. fig. 23.)

Castaneo-nigra, elytris plaga transversa versus basin (cano-pubescenti), sutura postice et marginibus testaceo-rufis; antennis articulis 1°–10ᵐ basi pallidis; capite et thorace subtiliter alutaceis, subopacis, hoc antice ruguloso; elytris nitidis, parte depressa basali punctata, tuberculo centro-basali compresso-conico, nudo; pedibus castaneo-fuscis, pedunculis pallidis.

Long. $1\frac{2}{3}$ lin.

Hab. GUATEMALA, Cerro Zunil (*Champion*).

2. **Myrmolamia penicillata.**

Minor, nigra, undique nitidissima; elytris versus basin fascia angusta, transversa, albo-pubescenti; antennis articulis 1°–8ᵐ basi pallidis; elytris basi lævibus, tuberculo centro-basali apice longe nigro-penicillato; pedibus nigris vel castaneis, pedunculis pallidis.

Long. 1 lin.

Hab. PANAMA, Bugaba, Tolé (*Champion*).

LAMIESSA (to precede the group Onciderini, p. 121).

Forma anomala, gen. *Eumolpo* similis. Corpus breviter oblongo-ovatum, longissime erecte pilosum. Caput valde retractum, inter antennas latum planum, tubera antennifera nullomodo elevata; frons quadrata; oculi subtiliter granulati, lobo inferiori sat angusto. Antennæ 9-articulatæ, corpore haud longiores, filiformes, undique sparsim setosæ; scapo sicut in *Estolis* typicis, brevi, sed gracilius clavato, articulo 3° quam scapus dimidio longiori, 4° quam præcedens paullo breviori et crassiori, 5°–9ᵐ multo brevioribus. Thorax cylindricus, medio perparum dilatatus, inermis, dorso anteriori valde convexo. Elytra ovata, convexa, apice rotundata. Prosternum angustum, inter coxas exsertas depressum, acetabulis extus angulatis; mesosternum fere planum; coxæ posteriores distantes. Pedes mediocres, longe pilosi; tibiæ sat latæ, intermediæ extus simplices; ungues divaricati, basi lati.

Unlike any other genus of Lamiidæ known to me.

In its structural characters it comes somewhat near to the *Pogonocheri* and *Eupogonii*; but in the thorax and head it most resembles certain genera belonging to the true "Saperdini." It is therefore probably an aberrant form of *Saperda*, remarkable for its relatively short and broad elytra.

1. **Lamiessa eumolpoides.** (Tab. XXII. fig. 24.)

Nigra, nitida; vitta angusta utrinque laterali a parte anteriori thoracis incipiente, per elytri humerum continuata et longe ante medium elytri terminata, vittaque abbreviata suturali, scutello maculaque transversa discoidali versus apicem, cano-tomentosis; antennis nigris, articulo 4° albescenti; capite sat confertim punctato; thorace grossissime (lateribus alveolato-)punctato; elytris grosse disperse punctatis, spatiis lævibus.

Long. $1\frac{3}{4}$ lin.

Hab. GUATEMALA, Teleman and Chacoj in the Polochic valley (*Champion*).

JAMESIA (p. 121).

Jamesia papulenta (p. 121).

To the localities given, add:—PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

TYBALMIA (p. 121).

Tybalmia cæca (p. 121).

To the locality given, add:—PANAMA, Bugaba (*Champion*).

Tybalmia funeraria (p. 122).

To the locality given, add:—GUATEMALA, San Juan in Vera Paz (*Champion*).

HYPSIOMA (p. 123).

Hypsioma picticornis (p. 123).

To the localities given, add:—MEXICO, Toxpam, Cordova (*Sallé*); GUATEMALA, Mirandilla, Pantaleon (*Champion*); NICARAGUA, San Juan del Sur (*Salvin*); PANAMA, Volcan de Chiriqui (*Champion*).

2. **Hypsioma corniculata.**

H. picticorni affinis et ejus individuis parvis angustisque similis, sed differt elytrorum humeris breviter carinatis capiteque in utroque sexu bicornuto. Oblonga, apud humeros mediocriter dilatata, obscure fusca fulvo-fusco variegata; elytris fascia mediana valde obliqua, indefinita, grisea; fronte atra; cornubus sat elongatis porrectis; thorace quam in *Plerodia degenera* minus conico, fere cylindrico, basi utrinque canosignato; elytris tuberculo nigro humerali elongato et compresso, nec in carinam distinctam continuato, dimidio basali sat confertim punctulatis. Antennæ carneo-fulvæ, articulis 3°–11^{m} apice nigris; scapo quam in *Plerodia degenera* apice crassius clavato articuloque 3° valde flexuoso.

Long. 5 lin. ♂ ♀.

Hab. NICARAGUA, Chontales (*Belt*); PANAMA, Bugaba (*Champion*).

Liable to be confounded with *Plerodia degenera*, but distinguished from it by the more strongly clavated scape and the flexuous third antennal joint, as well as by the much shorter humeral carina; there is the rudiment of an elongated carina, but it is not sharp and polished as in *Plerodia*. From very small and unusually narrow individuals of *Hypsioma picticornis*, to which species it is very closely allied, it differs again in

the shoulders of the elytra, which, in that species, have a simple but very prominent tubercle without trace of carina.

PLERODIA (p. 123).

Plerodia degenera (p. 123).

To the locality given, add:—MEXICO, Cordova (*Sallé*), Jalapa (*Höge*); GUATEMALA, Cerro Zunil, San Juan in Vera Paz, Volcan de Atitlan (*Champion*); PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

Closely allied to, if not the same species as, *P. singularis* (Thoms. Physis, ii. p. 61) from Cayenne. A specimen is labelled, evidently in error, *Hypomia mexicana*, Thoms., in the Sallé collection.

The genus *Plerodia* differs very slightly from *Hypsioma*, its chief differential characters being the very gradually thickened scape, carinated elytral shoulders, and more oblong form.

GLYPTHAGA (to follow the genus *Plerodia*, p. 123).

Glypthaga, Thomson, Physis, ii. p. 34; Lacordaire, Gen. Col. ix. p. 673.

The only species of this genus that has been described is from South Brazil. The following small and obscure species agrees with it in generic characters, viz. the much shorter and less plane forehead, the head wide between the eyes, with the apex of the antenniferous tubercles prolonged into horn-like processes curving outwards. The general form is elongate oblong.

1. **Glypthaga paupera.**

Elongato-oblonga, fusco-nigra, pube subtili ochraceo-fusca (apud elytra strigosa) vestita; fronte breviori, subconvexa, oculis infra elongatis; antennis scapo sat brevi, gradatim clavato, articulis 6°, 10° et 11° dimidio basali, 4°, 5°, 7°, 8° et 9° basi tantum, flavo-testaceis; elytris confuse punctatis, humeris mediocriter prominentibus.

Long. $4\frac{1}{2}$ lin.

Hab. MEXICO, Cordova (*Sallé*); BRITISH HONDURAS, Belize (*Blancaneaux*).

ONCIDERES (p. 124).

Oncideres tessellata (p. 125).

Var. 1. ♀. Elytris basi paullo sparsius granulatis et dimidio basali paullo densius punctulatis. (*O. vestita*, Chevr. MS.)

Hab. MEXICO, Cordova (*Sallé*). One example.

Var. 2. ♂. Elytris toto basi densius granulatis deinde sat confertim punctulatis; colore minus canescenti; maculaque cana laterali obsoleta.

Hab. GUATEMALA, Pantaleon (*Champion*). One example.

Oncideres putator (p. 125).

To the localities given, add:—MEXICO, Jalapa (*Höge*); GUATEMALA, San Juan in Vera Paz (*Champion*); PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

9. Oncideres digna.

Oncideres dignus, Bates, Ann. & Mag. Nat. Hist. ser. 3, xvi. p. 176[1].

Hab. PANAMA (*Boucard*).—SOUTH AMERICA, Amazons[1].

Two female examples exactly agreeing with others of the same sex from the Amazons.

10. Oncideres senilis.

O. putatori proxime affinis, sed robustior præcipue thorace latiori, etc. Pallide fusco-grisea, elytris fascia lata (vel dimidio basali) maculis numerosis rotundatis corporeque subtus medio, canis; thorace brevi et lato, tuberculo laterali valido, lato, conico, dorso rugoso, callis duobus in medio dorso nigris; elytris basi et lateribus granulis valde dispersis nigris, apud humeros tantum tuberculis majoribus et densioribus, cætera superficie sparsissime nigro-punctulata. ♂ caput haud cornutum.

Long. 12 lin. ♂ ♀.

Hab. MEXICO, Vera Cruz (*Sallé*), Jalapa (*Höge*); NICARAGUA, Chontales (*Janson*).

Distinct from *O. putator* by its more robust form, broader thorax, and especially by the much scantier and smaller black granules of the base and middle of the sides of the elytra; the granules, in short, do not assume the size of the round polished tubercles of *O. putator*, except on and below the shoulders.

11. Oncideres ocellaris.

O. putatori affinis. Longior, fulvescenti-fusca, elytris fascia lata mediana grisea, guttisque numerosis lineatim digestis aurantiaco-fulvis ochraceo-pupillatis; thorace valde transverso, tuberculo laterali valde elongato et robusto, dorso callis duobus nigris; elytris dimidio basali et lateribus usque ultra medium nigro-tuberculatis, tuberculis prope basin fere sicut in *O. putatori* sparsis sed magis æqualibus, tuberculis majoribus nullis, ultra medium sparsissime nigro-punctulatis; corpore subtus lateritio-fusco, griseo vario. ♂ caput haud cornutum.

Long. 12 lin. ♂.

Hab. GUATEMALA, Cerro Zunil (*Champion*).

Distinguished from *O. putator* and *O. senilis*, to both of which it is almost equally allied, by the rounded spots of the elytra, which are spread over the whole surface, partly in rows, these spots in *O. ocellaris* being, instead of whitish as in those species, of a rusty-red colour, with a paler speck in the centre of each.

12. Oncideres rhodosticta.

Minor, sat angusta, cylindrica, nigra subnitida; elytris fascia lata mediana alteraque angustiori basali griseis maculis rotundis numerosis sparsis, rufis; antennis, scapo nigro nitido excepto, cano-pubescentibus; thorace angustiori, tuberculo laterali lato conico, dorso griseo, fulvo-variegato, nigro-punctulato, callis tribus magnis nigro-nitidis; elytris undique sat confertim et profunde punctatis, punctis prope basin granulatis. ♂ caput haud cornutum.

Long. 7–7½ lin. ♂ ♀.

Hab. MEXICO, Lerdo (*Flohr in coll. Bates*). One pair only.

Not closely allied to any other species of the genus known to me. The elytra are much shorter than in *O. cingulata* and *O. scitula.*

TARICANUS (p. 126).

Taricanus truquii (p. 126).

To the Mexican locality given, add:—Izucar (*Sallé*), Tehuacan (*Höge*).

2. Taricanus minor.

Quam *T. truquii* multo minor; parvus, cylindricus, castaneo-rufus, capite, thorace, corporeque subtus griseo vel fulvo-griseo pubescentibus; elytris fascia lata vaga et triente apicali griseis, maculisque rotundis aurantiaco-fulvis præcipue versus medium et apicem obsitis; thorace breviter cylindrico, basi constricto, tuberculo laterali parva post medium; elytris undique confertim subconfluenter punctatis.

Caput sicut in *T. truquii* in ♂ angustius, inter antennas concavum, inerme; in ♀ latius, occipite et genis convexis, inter antennas fere planum. Oculi sat subtiliter granulati, subdivisi, lobo inferiori mediocriter elongato, angusto. Antennæ in ♂ corpore dimidio breviores, in ♀ corpore paullo breviores; articulis 1° et 3° subtus dense, 4°–11^{m} multo sparsius, ciliatis, scapo quam art. 3^{us} multo breviori, gradatim clavato, versus basin quam in *T. truquii* magis angustato; articulo 3° versus apicem gradatim incrassato.

Long. 3½–4 lin. ♂ ♀.

Hab. MEXICO, Jalapa (*Höge*).

A large number of examples.

Agrees with the very much larger and more robust *T. truquii* in all its generic characters except the shorter and somewhat differently thickened and ciliated antennæ. The essential peculiarities of these organs are, however, the same, the joints being naked above and densely ciliated or bearded beneath on the first and third joints.

PERIERGATES (p. 126).

2. Periergates chiriquensis.

Quam *P. rodriguezi* latior et robustior, niger, tomento aurantiaco-fulvo vestitus, spatiis nudis; thorace sicut in *Oncideri* brevissimo, basi angustato, medio dorso transversim interrupte rugoso; elytris triente basali confertim subconfluenter tuberculatis, deinde usque ad apicem punctatis, spatiis depressis maculisque rotundis et signaturis vermiculatis, aurantiaco-fulvis; corpore subtus densius fulvo-pubescenti, medio griseo.

♀. Antennæ corpore paullo breviores, articulis 1°–2^{m} undique dense breviter setosis nec incrassatis, 1° quam 3^{us} paullo breviori sat graciliter clavato; 3° et sequentibus subtus breviter ciliatis.

Long. 6½ lin. ♀.

Hab. PANAMA, Volcan de Chiriqui (*Champion*).

One example.

Lacordaire described his *P. rodriguezi* from a female example which he mistook for the male, which latter sex differs in having a narrower head, more elevated antenniferous tubercles (penicillated at their apices), and antennæ twice the length of the body,

with joints 4–11 three times the length of 1–3 united, instead of only equal to them as in the female; the eleventh joint especially being extremely long and slender.

3. **Periergates badeni.**

P. chiriquensi proxime affinis, corpore (♂) brevi, oblongo, robusto. Castaneo-fuscus, tomento fulvo maculatim et vermiculatim vestitus; capite confertim granulato; thorace cylindrico, quam lato parum breviori, basi mediocriter angustato, toto dorso transversim ruguloso, rugulis antice interruptis; elytris dimidio basali confertim granulatis, apicali crebre punctatis, medio basi, maculis majoribus a medio ad apicem, interstitiisque signaturis tenuibus vermiculeis, fulvo-tomentosis; antennis pedibusque rufo-testaceis.

♂. Antennæ corpore fere duplo longiores; scapo quam in *P. rodriguezi* breviori, undique breviter setoso et scabroso, articulo 3° haud incrassato, quam scapus paullo longiori, 3°–4^{m} subtus breviter dense ciliatis, 4°–10^{m} haud brevioribus, 11° longissimo, apice curvato. Tubera antennifera sat elevata apice penicillata. Long. 7 lin. ♂.

Hab. MEXICO? (*Baden, coll. Bates*).

One example.

Much broader and more robust than the Guatemalan species, which I take to be *P. rodriguezi*, and of which Mr. Champion found males only. In all essential points of structure the two widely different-looking species are congeneric.

EUDESMUS (p. 127).

2. **Eudesmus (?) niveilateris.**

Eudesmus niveilateris, Thomson, Physis, ii. p. 70[1].

Hab. MEXICO, Cordova (*Sallé*).—SOUTH AMERICA, Brazil [1].

Thomson doubted, I think justly, that this curious species belonged to the genus *Eudesmus*; but until both sexes are known it would be inexpedient to separate it.

ISCHIOLONCHA (to follow the genus *Eudesmus*, p. 127).

Ischioloncha, Thomson, Class. des Céramb. p. 122; Lacordaire, Gen. Col. ix. p. 711.

One species only of this remarkable genus has at present been recorded; it is from Cayenne.

1. **Ischioloncha lineata.** (Tab. XXII. fig. 25.)

Quam *I. wollastoni* brevior, subcylindrica, castaneo-rufa, pube subtilissima grisea vestita; thoracis dorso vittis tribus (mediana tenui), elytris utrinque vittis tribus (duabus dorsalibus ante apicem conjunctis interiorique basin haud attingente, tertiaque laterali basin haud attingente et post medium late interrupta) vittulaque subhumerali, ochraceis; pedibus et antennis nitidis, his articulis 4°–6^{m} basi griseo-testaceis, 3° adhuc longiori et paullo crassiori; coxis anticis haud spiniferis.
Long. 5¼ lin. ♂(?).

Hab. GUATEMALA, El Tumbador (*Champion*); COSTA RICA (*coll. Bates*).

Two examples, both apparently males.

This species is rather shorter and broader than *I. wollastoni*, Thoms., and shows that the genus is closely allied to *Eudesmus*, the head being constructed on precisely the

same plan as, for example, in *E. metallicus*; there was no need, therefore, for Lacordaire to remove it so widely from the "Onciderini," and make it the type of a separate Group, "Ischiolonchides."

CYLICASTA (p. 127).

Cylicasta terminata (p. 127).

To the localities given, add:—PANAMA, Bugaba (*Champion*).

ECTHŒA (p. 127).

Ecthœa quadricornis (p. 127).

To the locality given, add:—PANAMA, Bugaba (*Champion*).

Mr. Champion met with but two examples of this species during his long residence in Chiriqui. *E. quadricornis* appears to be very rare in Central America.

TRESTONIA (p. 128).

Trestonia assulina (p. 128).

To the locality given, add:—PANAMA, Bugaba (*Champion*).

CACOSTOLA (to follow the genus *Trestonia*, p. 128).

Cacostola, Fairmaire, Ann. Soc. Ent. Fr. 1859, p. 532; Lacordaire, Gen. Col. ix. p. 687.

Hitherto known only from South America, ranging from Cayenne to Chili. Five species have been described.

1. **Cacostola rugicollis.**

C. simplici (Pascoe) proxime affinis; differt thorace supra transversim ruguloso. Fere linearis, fusca, elytris vage canescenti-vittatis (vitta abbreviata, interrupta ab humeris fere usque medium, vittulisque brevibus utrinque duabus versus apicem); thorace supra toto transversim ruguloso, rugulis in fundo sparsim punctatis; elytris sicut in *C. simplici* confuse punctulatis, spatiis longitudinalibus sublævibus.

Long. $5\frac{1}{2}$ lin.

Hab. MEXICO, Cordova (*Sallé*).

2. **Cacostola —— ?**

Hab. PANAMA, Volcan de Chiriqui (*Champion*).

One female example only, possibly distinct from the Amazonian *C. simplex*, Pascoe.

HIPPOPSIS (p. 128).

Hippopsis lineolata (p. 128).

To the localities given, add:—MEXICO, Cordova, Juquila (*Sallé*), Oaxaca (*Höge*); GUATEMALA, Chiacam, Teleman, Paraiso, El Reposo, Panzos (*Champion*); PANAMA (*Boucard*), Bugaba, San Lorenzo (*Champion*).

SPALACOPSIS (p. 129).

Spalacopsis protensa (p. 129).

To the localities given, add:—MEXICO, Cerro de Plumas (*Höge*); GUATEMALA, Volcan de Atitlan, Mirandilla, Cerro Zunil, Las Mercedes, El Tumbador, Pantaleon (*Champion*).

Spalacopsis variegata (p. 129).

To the Guatemalan locality given, add:—Cerro Zunil (*Champion*).

Examples from Cerro Zunil are less variegated than the typical specimens from Calderas, which are from a higher elevation (6000–7000 feet); in some the markings are present, but of lighter brown colour, and in others the elytra are uniform dingy ashy. The apices of the elytra also are much less divaricated than in the typical examples. They are distinguishable, however, from similarly coloured specimens of *S. protensa* by the ventricose and punctate-striate elytra. In *S. protensa* the punctuation is confused. The following is apparently an extreme, elongated variety of this species:—

Var. *S. tenuissima*. Angustissima, sed elytris postice paullo dilatatis, variegatis, punctato-striatis apice variegatis.

Hab. MEXICO, Cerro de Plumas (*Höge*). One example only.

3. **Spalacopsis phantasma.**

Minor, tenuissima, fusco-cinerea; elytris postice subventricosis, sed basi haud depressis, a scutello usque ad apicem æqualiter modice convexis, confertim punctatis, setis rigidis curvatis passim obsitis, apice singulatim prolongatis; antennis scapo setis curvatis obsito, lanuginoso, articulis 3°–11ᵐ subtiliter dense breviter hirsutis et longissime pilosis.

Long. 4 lin.

Hab. GUATEMALA, San Gerónimo (*Champion*).

DORCASTA (p. 129).

Dorcasta oryx (p. 130).

To the localities given, add:—MEXICO, Oaxaca (*Höge*); BRITISH HONDURAS (*Blancaneaux*); GUATEMALA, Mirandilla, El Tumbador (*Champion*); PANAMA, Bugaba, David, San Feliz, Tolé (*Champion*).

1 (A). **Dorcasta longipennis.**

Linearis, elytris valde elongatis postice perparum angustatis lateribus rectis; sicut in *D. furcula* haud setosa, cinereo-olivaceo tomentosa, thorace vittis angustis nigris octo interdum perparum conjunctis, cylindrico nec sicut in *D. furcula* et *D. lignea* antice convexo; elytris utrinque vitta abbreviata prope scutellum, tribusque flexuosis, hic illic dilatatis, ab humeris usque ad apicem continuatis (prope apicem vitta interiori bidentata); lineatim punctatis, costa utrinque obtusa lævi; apice sinuato-truncatis, angulo exteriori valde prolongato, suturali acuto; antennis sicut in *D. oryci* crassis filiformibus, omnibus articulis infra minus longe et dense ciliatis; oculis divisis.

Long. $4\frac{1}{4}$ lin.

Hab. GUATEMALA, Panima and Chiacam in Vera Paz (*Champion*); PANAMA, Bugaba (*Champion*).

2 (A). **Dorcasta lignea.**

Dorcasta lignea, Bates, Ann. & Mag. Nat. Hist. ser. 3, xvii. p. 35[1].

Varies from $2\frac{1}{2}$–4 lines.

Hab. BRITISH HONDURAS (*Blancaneaux*); NICARAGUA, Chontales (*Janson*); PANAMA, David (*Champion*).—AMAZONS, Santarem[1].

The only structural difference between this species and *D. furcula* is in the less prolonged apices of the elytra, which also are less close together, owing to the less oblique truncature, which leaves plainly visible the marked sutural angle. To this peculiarity, however, is added one of elytral markings, *D. lignea* having always a long arcuated cinereous spot in the middle of each side, of which there is scarcely any trace in *D. furcula*. The dark brown circumscutellar spot is in both rather short and quadrate, and bordered externally by a very broad ashy-white vitta, which curves from the shoulders to the suture. In both species the upper lobe of the eyes is very narrow, scarcely broader than the narrow band which connects it with the lower lobe. The ciliæ of the antennæ are very short and less dense than in *D. oryx*.

2 (B). **Dorcasta mexicana.**

D. furculæ et *D. ligneæ* affinis, sed differt macula atro-fusca circumscutellari triangulari extus vitta angusta recta et obliqua marginata. Fulvo-fusca, thorace (antice convexo) vittis duabus angustis dorsalibus nigris et utrinque vitta laterali angusta albo-cinerea; elytris fulvo-fuscis, macula magna circumscutellari vittaque lata curvata (plus minusve elongata) dorsali, nigris; vitta obliqua utrinque juxta maculam circumscutellarem, maculaque angusta laterali intus arcuata et apud marginem maculam nigram includente, cinereis; postice versus suturam guttis utrinque una vel duabus nigris interdum vittula cinerea connexis; thorace crebre, elytris lineatim, punctatis, his apice sinuatim oblique truncatis angulo exteriori plus minusve prolongato; antennis et oculis sicut in *D. lignea*.

Long. 3–$3\frac{1}{2}$ lin.

Hab. MEXICO, Cordova (*Höge*); GUATEMALA, Volcan de Atitlan (*Champion*).

Dorcasta geometrica (p. 130).

To the localities given, add:—MEXICO, Playa Vicente (*Sallé*), Cordova (*Sallé*, *Höge*); GUATEMALA, Las Mercedes, San Gerónimo, Cerro Zunil (*Champion*); PANAMA, Volcan de Chiriqui (*Champion*).

4. **Dorcasta obtusa.** (Tab. XXIII. fig. 1.)

D. geometricæ quoad signaturas simillima, sed valde differt elytris apice obtuse rotundatis. Cylindrica, postice haud angustata, fusca; thorace parum convexo, vittis duabus utrinque lateralibus albo-cinereis, dorso vittis nigris tribus antice convergentibus et marginem anticum attingentibus; elytris apice citius declivibus, macula magna semiovata circumscutellari (postice albo-cinerea marginata) figuraque pone medium X-formi, communibus, atro-fuscis, interspatiis et apice pallidius fuscis albo-cinereo lituratis; antennis filiformibus, crassis, obscure fuscis, subtus dense breviter ciliatis.

Long. $3\frac{2}{3}$ lin.

Hab. MEXICO, Cerro de Plumas (*Höge*); GUATEMALA, Mirandilla (*Champion*).

XENOFREA (to follow the genus *Dorcasta*, p. 130).

Groupe *Crossotides*, Lac.? Gen. *Eumimeti* affinis. Corpus subtrigonum. Caput retractile, inter antennas parum concavum; frons brevis et lata; oculi subgrosse granulati, lobo inferiori paullo transverso. Antennæ tenuiter filiformes, subnudæ, corpore paullo longiores; scapo sicut in *Estolis* et *Oreoderis*, mediocri, oblongo-clavato, basi intus sinuato-angustato; articulis 3 et 4 æqualibus, mediocriter elongatis, subcurvatis, apice subtus leviter incrassatis, cæteris gradatim decrescentibus. Thorax valde transversus, post medium dilatatus ibique lateribus angulatis vel late tuberculatis, deinde antice valde angustatus, tuberculo obtuso juxta angulum anteriorem. Elytra brevia, a basi usque ad apicem angustata, apice conjunctim rotundata. Pedes mediocres, femora sat crasse clavata; tibiæ intermediæ extus prope apicem sinuatæ; tarsi breves. Pro- et mesosternum planissima et latissima. Coxæ sat exsertæ; acetabula antica extus late angulata; intermedia late aperta.

A genus having no near affinity with any other American form of Lamiidæ, except perhaps the genus *Anoreina*, Bates. In facies it most resembles certain undescribed African species allied to *Frea* and *Dichostates*; but it differs from the group "Crossotides," to which these belong, in having a distinct sinus on the outer edge of the middle tibiæ. From the American group "Anisocerides," with which it agrees in the gaping outer rims of the anterior and middle acetabula, it differs in the form of the scape, which is that of the great majority of the Estolides, Apodasyides, and Pogonocherides of Lacordaire, and of the genus *Oreodera*. The head is strongly retractile as in the Crossotides, the mouth resting in repose on the broad prosternum between the prominent anterior haunches. The position of the genus seems to be between the African "Crossotini" (especially *Eumimetes*) and the American "Oreoderini," through the genus *Anoreina* of the latter group, which differs from *Xenofrea* in its ciliated and bristly antennæ, the sharp notch nearer the middle of the intermediate tibiæ, and the acetabular suture of the anterior haunches nearly closed as in *Oreodera*.

Two other species from Equatorial South America belong also to the genus *.

1. Xenofrea anomala.

Castaneo-fusca, subnitida, sparse fulvo incumbenti-pubescens thoraceque maculis indefinitis quatuor et elytris maculis irregularibus sparsis, fulvo-tomentosis; pedibus fusco-nigris, femorum pedunculis rufescentibus;

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* Xenofrea trigonalis.

Major et latior, elytris brevius trigonis; fusco-nigra, griseo-fusco sparsim pubescens, thorace lituris numerosis elytrisque plagis basalibus et maculis definitis utrinque 8°–10ᵐ apicalibus, fulvo-ochraceis, medio fascia maculari cinerea; thorace subtilissime sparsim punctato, post medium late angulato; elytris grossissime subconfluenter punctatis, interstitiis nonnullis post medium elevato-reticulatis.

Long. 4½ lin.

Hab. Peru, Chanchamayo (*Thamm*).

Xenofrea zonata.

Magis oblonga, elytris basi minus dilatatis; fusca, griseo-fusco pubescens, thorace maculis indefinitis elytrisque plagis basalibus et apicalibus, carneis, fascia lata recta mediana grisea; thorace grossius crebriusque punctulatis, lateribus post medium tuberculis parvis utrinque duobus, tertiaque majori prope angulum anticum; elytris confertim grosse punctatis; antennis griseo-carneis, articulis 3°–11ᵐ apice nigris.

Long. 4¾ lin.

Hab. Amazons, Santarem? (*H. Smith*).

thorace sparsim punctulato; elytris confertim subconfluenter punctatis; antennis testaceo-rufis versus apicem fusco-nigris.

Long. $2\frac{3}{4}$ lin.

Hab. PANAMA, Bugaba (*Champion*).

2. **Xenofrea areolata.** (Tab. XXIII. fig. 2.)

Magis oblonga, elytris basi minus dilatatis; fusca, fulvo-ochraceo tomentosa, thorace plagis densius tomentosis; elytris fasciis 5 vel 6 valde undulatis, plerumque obliquis, densius tomentosis, areolas fuscas nitidas includentibus, fascia 2ª a basi curvata cinereo-tincta; thorace sat confertim punctato, tuberculo parvo obtuso laterali submediano alteroque juxta marginem anticum; elytris elongato-subtrigonis, grosse confertim punctatis; antennis rufo-testaceis concoloribus.

Long. 4 lin.

Hab. PANAMA, Bugaba (*Champion*).

3. **Xenofrea (?) —— ?**

Hab. GUATEMALA, Las Mercedes (*Champion*).

One example (imperfect) of a species of oblong or subcylindrical form, resembling a very small *Alphus*, evidently an aberrant *Xenofrea* or nearly allied genus.

THRYALLIS (p. 131).

Thryallis undatus (p. 131).

To the Mexican locality given, add:—Almolonga (*Höge*).

Thryallis leucophæus (p. 131).

To the Guatemalan localities given, add:—Torola, Chacoj, Cerro Zunil (*Champion*), Yzabal (*Sallé*).

5. **Thryallis granulosus.** (Tab. XXIII. fig. 3, ♂.)

Cæteris speciebus paullo longius ovatus, capite thoraceque antice relative angustioribus; niger, olivaceo-cinereo (subtus et lateribus cinereo) tomentosus, nigro piperitus; elytris pone medium fascia transversa leviter flexuosa nigro-velutina antice cinereo-marginata; thorace dorso tuberculis duobus elevatis nigris nitidis; elytris passim (versus basin densius) nigro-granulatis, medio dorso costulis duabus parum elevatis.

Long. $4\frac{3}{4}$–$6\frac{1}{2}$ lin. ♂ ♀.

Hab. GUATEMALA, Cerro Zunil (*Champion*).

CHALASTINUS (p. 131).

2. **Chalastinus championi.** (Tab. XXIII. fig. 4, ♂.)

C. rubrocincto proxime affinis; quoad formam simillimus sed differt thoracis tuberculo laterali acuto, scapoque apice crassius clavato. Fuligineo-niger, elytris paullo ante medium fascia latiori ochraceo-flava (plus minusve rubro-aurantiaco marginata) vel toto rufa, maculaque elongata subsuturali prope apicem, rubro-aurantiaca.

Long. 6–9 lin. ♂ ♀.

Hab. PANAMA, Bugaba (*Champion*).

Many examples.

3. Chalastinus —— ?

Hab. PANAMA (*Boucard*).

A single example, imperfect and discoloured, of a species apparently distinct from the foregoing.

ANISOCERUS (p. 132).

Anisocerus palliatus (p. 132).

To the localities given, add:—GUATEMALA, Panzos, Chacoj (*Champion*); PANAMA (*Boucard*), Volcan de Chiriqui, Bugaba (*Champion*).

ACROCINUS (p. 133).

Acrocinus longimanus (p. 133).

To the localities given, add:—MEXICO, Cordova (*Sallé*), Almolonga, Cerro de Plumas (*Höge*); GUATEMALA, Cubilguitz, El Reposo, Cerro Zunil, Zapote (*Champion*); COSTA RICA (*Van Patten*); PANAMA, Bugaba, Volcan de Chiriqui (*Champion*).

OREODERA (p. 133).

Oreodera glauca (p. 133).

To the localities given, add:—GUATEMALA, Champerico (*Champion*); PANAMA, Bugaba (*Champion*).

Oreodera granulifera (p. 134).

To the locality given, add:—PANAMA, Bugaba (*Champion*).

Oreodera costaricensis (p. 134).

To the localities given, add:—PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

Oreodera inscripta (p. 134).

To the locality given, add:—PANAMA, Volcan de Chiriqui (*Champion*).

Long. $3\frac{1}{2}$–6 lin.

In my original description I omitted to mention the antennæ; they are black with the basal half of many of the joints grey. This is a constant character distinguishing the species from *O. obsoleta* (which has traces of pale zigzag lines towards the apex of the elytra) and from *O. graphiptera* (described below), which it resembles closely in markings. Both these species have the antennal joints 2–3 ringed with fuscous in the

middle, like *O. costaricensis* and *O. purpurascens*. *O. corticina*, Thoms., has the same coloration of the antennæ as *O. inscripta*.

9 (A). **Oreodera graphiptera.**

O. inscriptæ quoad elytrorum signaturas similis, sed differt antennarum articulis 3 et 4 ante medium fusco-annulatis, &c. Sat breviter oblongo-trigona, fusca, tomento subtili ochraceo-fusco vestita (nec sicut in *O. inscripta* nigra tomento griseo induta); thorace tuberculis 2 mamilliformibus, sparsim grosse punctato; elytris apice breviter oblique truncatis, a basi usque ultra medium discrete sat grosse punctatis, crista penicillata centro-basali, versus apicem lituris obscure griseis hic illic angulatis, maculas elongatas nigro-fuscas includentibus (litura grisea recta obliqua pone medium deest); antennis testaceo-griseis, scapo, articulis 3°–11^{m} apice, et 3°–4^{m} quoque annulo prope basin, rufescenti-fuscis.

Long. $3\frac{1}{2}$–$4\frac{1}{2}$ lin.

Hab. PANAMA (*Boucard*), Volcan de Chiriqui, Bugaba, David, La Caldera (*Champion*).

Oreodera obsoleta (p. 134).

To the locality given, add:—MEXICO, Tehuantepec (*Sumichrast*); GUATEMALA, Cerro Zunil (*Champion*).

Oreodera fasciculosa (p. 135).

Oreodera hispida (p. 135).

To the localities given, add:—MEXICO, Cosamaloapam (*Sallé*), Jalapa, Tehuacan (*Höge*); BRITISH HONDURAS (*Blancaneaux*); GUATEMALA, El Reposo, Panzos, Torola (*Champion*); NICARAGUA, Chontales (*Belt*).

Specimens from all the above localities (and also from Cordova previously recorded) belong undoubtedly to one and the same species, which is probably correctly named *O. fasciculosa*, Thomson, in the Sallé collection. Notwithstanding therefore the very insufficient description, by which the species could not possibly be recognized, I presume Thomson's name must be adopted.

ALPHUS (p. 136).

Alphus cavifrons (p. 136).

To the locality given, add:—PANAMA, Bugaba (*Champion*).

MYOXINUS (p. 136).

Myoxinus pictus (p. 136).

To the localities given, add:—MEXICO, Orizaba (*Sallé*); GUATEMALA, San Juan in Vera Paz, Teleman, Panzos, Senahu (*Champion*); PANAMA, Bugaba (*Champion*).

ÆTHOMERUS (p. 137).

Æthomerus asperulus (p. 138).

To the localities given, add:—MEXICO, Cordova (*Sallé*); GUATEMALA, Senahu (*Champion*); PANAMA (*Boucard*), Volcan de Chiriqui, Bugaba, David (*Champion*).

Varies in length from 3–5½ lines, and in general colour from blackish brown to tawny rufous brown. The only constant character which distinguishes it from *Æ. antennator* (Fabr., Bates) of Guiano-Amazonia and other species from South Brazil is the large size of the sharp tubercles which stud the elevated lines of the elytra.

STEIRASTOMA (p. 138).

Steirastoma histrionica (p. 138).

The localities given for this species are inexact and must be replaced by the following list, in which also subsequent additions are included:—MEXICO, Orizaba, Tuxtla, Playa Vicente, Cordova (*Sallé*), Misantla, Almolonga (*Höge*); BRITISH HONDURAS, Belize (*Blancaneaux*); GUATEMALA, Torola (*Champion*); NICARAGUA, Chontales (*Belt*, *Janson*); COSTA RICA, Cache (*Rogers*); PANAMA (*Boucard*), Volcan de Chiriqui, Bugaba, Tolé (*Champion*).

Var. *S. larva* (p. 138). Differt thoracis lateribus utrinque, elytrisque sub humeros et apud discum, macula cinereo-alba.

Hab. PANAMA (*Champion*, *Macleannan*, *Boucard*).—SOUTH AMERICA, Colombia, Venezuela.

The Venezuelan *S. larva* proves to be only a geographical variety of the Mexican *S. histrionica*, when a long series of specimens from intermediate localities is examined. The structural peculiarities mentioned by Chevrolat are of no value, as they vary according to the degree of development of the insect; the colour of the pubescent stripes on the elytra is very similar in the specimens from all the localities, and the only differential characters which seem to be really distinctive are the greyish-white spots on the sides of the thorax, under the shoulders of the elytra, and on the disc of the latter. I have seen specimens with these spots, in Central-American collections, only from the Isthmus of Panama, where they appear to be mixed with normal examples of *S. histrionica*.

2 (A). **Steirastoma cœnosa.** (Tab. XXIII. fig. 6.)

Steirastoma cœnosum, Bates, Ann. & Mag. N. H. ser. 3, ix. p. 398 [1].

Hab. PANAMA, Bugaba (*Champion*).—SOUTH AMERICA, Amazons [1].

Similar to *S. melanogenys*, though broader and with larger and more compact velvety-black elytral spots, and the sides of the thorax also velvety-black. In structure it differs in the truncature of the elytra being oblique, and the apical spines consequently nearer together, and the third antennal joint underneath having a few short bristles instead of a cluster of spines.

Steirastoma senex (p. 138).

To the localities given, add:—GUATEMALA, Cerro Zunil, San Isidro, El Reposo, Las Mercedes, Torola (*Champion*); PANAMA, Bugaba (*Champion*).

There is no difference between this species and *S. melanogenys* except in colour, the head and median area of the elytra being hoary white in *S. senex*, and tawny brown like the rest of the surface in *S. melanogenys*. The Chontales specimen I referred (*ante*, p. 138) to *S. melanogenys* is nearly intermediate between the two forms, having the forehead of lighter colour than in South-American specimens.

5 (A). **Steirastoma liturata.** (Tab. XXIII. fig. 5.)

S. stellioni affinis et similis, sed differt *S. signaturis* nigris tenuioribus, etc. Minor et gracilior, albo-cinerea, elytris guttis suturalibus et marginalibus fasciisque (plus minusve interruptis) tenuibus valde undulatis, nigris; thorace carinis tribus parallelis; elytris apice oblique breviter truncatis, angulo exteriori acute dentiformi, carina dorsali mediocriter flexuosa basi granulata, versus humeros sparsim plerumque lineatim granulatis; ventre medio nigro nitido; antennis articulis 3°–7^{m} apice fuscis; scapo pyriformi-clavato, articulo 3° subtus fere usque ad apicem spinuloso.

Long. $5\frac{1}{2}$–7 lin. ♂ ♀.

Hab. GUATEMALA, Torola (*Champion*).

ACANTHODERES (p. 139).

Acanthoderes rubripes (p. 139).

To the locality given, add:—PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

Acanthoderes bivitta (p. 140).

To the localities given, add:—PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

Acanthoderes lugens (p. 140).

To the locality given, add:—MEXICO, Almolonga, Tehuacan (*Höge*).

Examples in the Sallé collection, evidently correctly named, show that this species (so insufficiently described by its author) belongs to the group of less elongated subtrigonal species, which have a flexuous dorsal carina (like the *Steirastomæ*), and narrow sinuate-truncate elytral apices. It is distinguished from other described species of its group (except from *A. sylvanus*) by the compact yellowish-white tomentum which clothes its square flat forehead; the elytral carinæ diverge, and become a little more elevated towards the base, and are there granulate-tuberculated; a few much-scattered granulæ are seen also between the carinæ and the shoulders. The colour of the elytra is lightish brown, becoming ashy brown towards the suture, and much spotted with dark brown; there are also three or four lateral much-angulated dark-brown fasciæ or patches, but no distinct whitish fascia. It ranges in size from 6 to 9 lines. The mesosternum in front is subvertical, with a tubercle on each side of the edge of the declivity.

Acanthoderes sylvanus (p. 141).

To the locality given, add:—GUATEMALA, Purula (*Champion*).

The broad oblique ashy white fascia is sometimes narrow and broken, or even quite

obsolete. The forehead is clothed with an ochreous-brown tomentum, and the granulæ over the base of the elytra and the base of the carinæ are much more numerous than in *A. lugens*. The two species are very closely allied.

15. **Acanthoderes purulensis.** (Tab. XXIII. fig. 7.)

A. lugenti proxime affinis. Trigono-oblongus, fusco-niger, griseo-albo et fusco plagiatim tomentosus; fronte alba; thoracis dorsi carinis valde elevatis, compresso-conicis apice indentatis; elytris apice angustis, sinuato-truncatis, angulo exteriori breviter producto, carinis dorsalibus flexuosis versus basin elevatis et crebre granulatis, tota basi et humeris sparsim granulatis, macula magna obliqua humerali, et area suturali albo-grisea vel grisea, hac fusco-guttata; prosterno postice et mesosterno apice subverticalibus, bituberculatis; antennis nigris albo-annulatis, articulis 3°–4ᵐ conjunctis cæteris sequentibus subæqualibus.
Long. $6\frac{1}{2}$–7 lin. ♂ ♀.

Hab. GUATEMALA, Purula (*Champion*). Three examples.

16. **Acanthoderes polystictus.** (Tab. XXIII. fig. 8.)

A. inquinato proxime affinis; differt elytrorum coloribus. Sat elongatus, fulvo-fuscus, elytris signaturis angustis ochraceis, guttisque innumerabilibus et circumflexa utrinque post medium, nigris; fronte nigra; thorace carina dorsali tuberculoque utrinque compresso (postice gradatim declive), interstitiis grosse punctatis; elytris sat elongato-trigonis, apice recte truncatis, angulo suturali recto, exteriori longe spinoso, dorso haud carinatis, carinula obtusa centro-basali excepta, dimidio basali sat dense nigro-granulatis deinde usque ad apicem nigro-punctatis, margine basali utrinque læte flavo-cinereo sericeo; mesosterno subverticali et bituberculato; pedibus elongatis, tibiis 4 posterioribus griseis annulis duobus nigris, tarsis anticis ♂ articulis 1°–3ᵐ nigris, 4 posterioribus articulis nigris apice griseis, unguibus rufo-testaceis; antennis ♂ quam corpus dimidio longioribus, fusco-nigris, articulis 3°–8ᵐ annulis duobus griseis, articulo 10° scopifero.
Long. $5\frac{1}{2}$–9 lin. ♂ ♀.

Hab. PANAMA, Bugaba (*Champion*).

Belongs to a numerous group of the genus, which includes *A. vetustus*, *A. pigmentatus*, *A. longitarsis*, *A. bivitta*, *A. inquinatus*, and others, characterized by their elongated body and joints 4–11 of the antennæ, and the transverse truncature and long apical spines of the elytra. It differs from *A. inquinatus* in the prevailing colour of the elytra being tawny brown, not ashy grey. From the very similarly-coloured and punctured *A. vetustus* it constantly differs in the form of the lateral (dorsal) carinæ or ridges of the thorax, which form long compressed tubercles gradually rising from behind, whilst in *A. vetustus* they are abruptly raised and almost hook-shaped.

17. **Acanthoderes umbratus.** (Tab. XXIII. fig. 9.)

A. laterali proxime affinis. Brevis, fulvo-fuscus; thorace lateribus elytrisque fasciis obliquis lateralibus valde dentatis duabus (altera latiori pone medium altera angustiori prope apicem) guttisque suturalibus, saturatius fuscis; thorace tuberibus dorsalibus utrinque compresso-conicis, apice bituberculatis; elytris trigonis, apice truncatis anguloque exteriori longe spinosis, carinis dorsalibus apud basin valde divaricatis et elevatis, multituberculatis, basi sparsim granulatis deinde fere lævibus; antennis brevibus, articulis 3°–4ᵐ conjunctis quam cætera sequentia longioribus; pro- et mesosterno verticalibus, bituberculatis.
Long. 5–7 lin. ♂ ♀.

Hab. GUATEMALA, Cerro Zunil (*Champion*). Many examples.

In some examples there is a broad oblique stripe on the elytra anterior to the submedian dusky streak, of a paler tawny brown than the ground-colour, which latter is a reddish brown, inclining to tawny orange. The antennæ, tibiæ, and tarsi are ringed as usual in the group.

18. **Acanthoderes arietis.** (Tab. XXIII. fig. 10.)

A. cornuto affinis; differt *inter alia* thoracis tuberibus latero-dorsalibus parum elevatis apice bituberculatis. Oblongo-subovatus (elytris minus recte trigonis) rufescenti-fulvo-fuscus; elytris nigro-fusco guttatis, maculisque angularibus discoidalibus utrinque tribus, nigro-fuscis, litura communi cornua arietis simulanti versus basin, flava; fronte cinereo-flava, occipite purpureo-fusco fulvo bilineato; elytris apice angustis, sinuato-truncatis, angulo exteriori dentiformi, carinis dorsalibus validis basi divaricatis et granulatis, basi sparsim granulatis deinde disperse grosse punctatis; femoribus castaneo-rufis vel fuscis, tibiis nigro- et griseo-annulatis; mesosterno declivi bituberculato; antennis quam ♂ corpus paullulum longioribus, articulis 3°–4^{m} conjunctis quam cætera sequentia brevioribus, articulis 3°–11^{m} basi plerumque anguste griseis.

Long. 6–9½ lin. ♂ ♀.

Hab. Guatemala, Cerro Zunil (*Champion*).

This well-marked species, of which Mr. Champion took a very large series, bears a curious resemblance to *A. cornutus*, which is also from Guatemala, but known only from a single example; the structural difference, however, forbids the supposition that they may be varieties of one and the same species. There is no tendency in *A. arietis* towards the great elevation of the latero-dorsal tubers of the thorax, and the projection of the base of the elytral carinæ which distinguish *A. cornutus*; the general colour, too, and the form of the yellowish ram's-horn marking across the suture are not quite the same.

19. **Acanthoderes borrei.**

Acanthoderes Borrei, Dugès, Ann. Soc. Ent. Belg. xxix.*

Hab. Mexico, Guanajuato (*Dugès*).

A species closely allied to *A. circumflexus*, but certainly distinct. In the extension to the shoulder of the broad pale streak of the elytra it approaches *A. inquinatus*.

20. **Acanthoderes —— ?**

Hab. Mexico (*Sallé*).

A single specimen, in very bad condition, of similar form to *A. doctus*, but evidently distinct, the thoracic dorsal tubercles being very small, and the elytra obtusely truncated.

SYCHNOMERUS (to follow the genus *Acanthoderes*, p. 142).

A gen. *Acanthodere* differt solum antennarum articulis 3°–11^{m} apice subtus dense barbatis, et 7°–11^{m} præsertim in ♀ multo abbreviatis, longius et densius barbatis.

Two species of Central-American "Acanthoderini" are here separated from *Acantho-*

* The description of this species is unpublished as yet.

deres on the same grounds as *Discopus*, *Pteridotelus*, *Tetrasarus*, and *Plagiosarus* are separated, namely, differences in the clothing and structure of the antennæ. In all other respects these genera agree with *Acanthoderes*, and in some of them the contained species have little resemblance to each other, except that which their antennal structure gives them.

The typical species of *Sychnomerus* has greatly the appearance of a *Pteridotelus*; but it wants the dentiform processes of the undersides of joints 7, 9, and 10 which characterize that genus; what seem to be such processes in *Sychnomerus* prove on close examination to be dense tufts of hair.

1. **Sychnomerus hirticornis.** (Tab. XXIII. fig. 11.)

Pteridoteli laticorni similis, sed relative multo brevior; ochraceo-cinereus fusco-punctatus, antennis articulis 3°–7ᵐ apice, 8°–11ᵐ toto, nigris; thorace lato, dorso tricarinato, carinis exterioribus abbreviatis, tuberibus lateralibus magnis conicis; elytris subtrigonis, sparsim grosse punctatis, apice angustis truncatis, angulo suturali subacuto exteriori prolongato, carinis dorsalibus validis basi late divaricatis ibique crenatis; corpore subtus medio nigris nitidis.

Long. 4–6½ lin. ♂ ♀.

Hab. GUATEMALA, El Tumbador, Cerro Zunil (*Champion*).

Captured in great abundance by Mr. Champion.

2. **Sychnomerus barbiger.** (Tab. XXIII. fig. 12.)

Ovatus, niger, nitidus; fronte, thorace vitta utrinque lata, elytris plaga magna humerali, alteraque communi apicali (postice ad marginem trisinuata) albis nigro-guttatis; thorace tuberibus dorsalibus conicis parum elevatis, carina dorsali obsoleta, tuberculis lateralibus validis acutis, plagiatim grosse punctato; elytris brevibus apice oblique truncatis, sparsissime et grossissime punctatis, carinis dorsalibus nullis, tuberibus centro-basalibus vix elevatis granulatis; pedibus nigris; tibiis medio late albo-annulatis, anticis gradatim mediocriter dilatatis; tarsis articulis 1° et 4° griseis; antennis (♀) quam corpus brevioribus, robustis, articulis 3° et 4° conjunctis quam cætera sequentia longioribus, 3°–11ᵐ apice subtus longe nigro-barbatis; nigris, articulo 4° dimidio basali testaceo, cæteris basi anguste griseis.

Long. 4 lin.

Hab. GUATEMALA, Sinanja (*Champion*).

One example only. The antennæ are rather more densely tufted at the apex of the third and fourth joints, and therefore approach the structure of the genus *Tetrasarus*; but the long beard of black hairs at the apices of the third and fourth joints does not form a compact brush as in that genus; it depends from the under surface only, and is repeated on all the following joints from 5 to 11.

AMBLYSAPHES (to follow the genus *Sychnomerus*).

Gen. *Acanthoderi* affinis. Differt capite ab occipite usque ad labrum curvato, fronte brevi, genis obtusissimis; mandibulis brevibus, crassis; thoracis dorso simplici, convexo, tuberculis lateribus parvissimis acutis; tibiis intermediis ante apicem leviter sinuatis; prosterno arcuato mesosternoque gradatim declivi.

The insect on which this new genus is founded recedes too far from *Acanthoderes*,

even in its most aberrant forms, to be included in that polymorphic assemblage. The antennæ do not differ from those of the group in which these members are short and simple, and the anterior acetabular suture is nearly closed as in all *Acanthoderes*. The punctate-striate elytra and style of markings of the new genus show that we have here to deal with a type distinct from *Acanthoderes*.

1. **Amblysaphes striatus.** (Tab. XXIII. fig. 13.)

Anguste oblongus, convexus, obscure fuscus; thorace vittis tribus angustissimis flavis, grosse confluenter punctato; elytris apice conjunctim rotundatis, punctato-striatis, obscure ochraceo-fusco lineatis, setulis brevibus albis incumbentibus obsitis; antennis (♂?) quam corpus brevioribus, versus apicem tenuibus.

Long. $5\frac{1}{2}$ lin.

Hab. GUATEMALA, Teleman (*Champion*).

TETRASARUS (p. 142).

Tetrasarus pictulus (p. 143).

To the locality given, add:—MEXICO, Parada (*Sallé*).

6. **Tetrasarus formosus.** (Tab. XXIII. fig. 14.)

T. albescenti haud dissimilis sed major elytrisque utrinque plagis magnis nigris tribus, etc. Oblongus, niger, supra flavescenti-albus nigro-guttatus; thorace lateribus elytrisque utrinque maculis transversis magnis (marginibus dilaceratis) extus dilatatis tribus, quartaque minori apicali, nigris; capite lineis duabus frontalibus maculisque duabus occipitalibus ochreis; thorace tuberibus dorsalibus grossis apice indentatis, lateribus conicis acutis, carina dorsali nulla; elytris apice sat late transversim sinuato-truncatis, angulis paullo productis, carinis brevibus centro-basalibus porrectis, granulatis, dorsalibus obtusissimis, sparsim punctatis; pro- et mesosterno verticalibus bituberculatis; tibiis annulo mediano, tarsorum articulis 1° et 4°, griseis; tibiis anticis sat gradatim dilatatis; antennis articulis 3°–4^{m} griseo-biannulatis apice scopis magnis nigris, articulis 5°–11^{m} basi griseis, 5°–6^{m} apice infra pluri-setosis, apicalibus (♀) haud hirsutis.

Long. $7\frac{1}{2}$ lin. ♀.

Hab. COSTA RICA (*Van Patten*).

Three examples, all females.

7. **Tetrasarus plato.** (Tab. XXIII. fig. 15.)

Oblongo-ovatus, latus, supra subplanatus, niger; elytris albis, fascia basali, macula discoidali (post medium) lituris marginalibus guttisque nonnullis, nigris; thorace carina dorsali valida sed obtusa, tuberibusque dorsalibus magnis apice bituberculatis, lateralibus maximis conicis; elytris late trigono-ovatis apice breviter sinuato-truncatis, pauciter punctatis, carinis centro-basalibus valde elevatis, porrectis tuberculatis; tibiis griseo-biannulatis, anticis (♂) parum dilatatis, tarsorum articulis 1° et 4° griseis; pro- et mesosterno verticalibus bituberculatis.

Long. 7 lin. ♂.

Hab. GUATEMALA? (*Mus. Stuttgart*).

PLAGIOSARUS (p. 144).

2. **Plagiosarus literatus.**

P. binoculo proxime affinis. Fulvo-fuscus, elytris utrinque ante medium fascia vaga obliqua maculisque poste-

rioribus cinereo-albis, et litura utrinque post medium fere M-formi maculisque binis prope apicem fusco-nigris; thorace carina tuberibusque dorsalibus validis, tuberculo laterali angusto spiniformi; elytris prope apicem subito angustatis apice truncatis, angulis exterioribus divaricatis, carina dorsali flexuosa basi valde elevata, et tota basi sparsim tuberculata; antennis fusco-nigris, articulo 3° (scopo nigro excepto) cæterisque basi, testaceis; tibiis annulis tribus, tarsis (art. 2° fusco excepto) testaceis.

Long. 4 lin. ♀.

Hab. GUATEMALA, Senahu (*Champion*).

One example only.

3. **Plagiosarus melampus.** (Tab. XXIII. fig. 16.)

Oblongo-ovatus, niger, pube subtilissima fusco-nigra vestitus subnitidus; elytris guttulis difformibus griseo-albis subfasciatim conspersis; thorace carina dorsali obsoleta, tuberibus dorsalibus apice bituberculatis, lateralibus sat anguste conicis acutis; elytris prope apicem subito angustatis, apice transversim sinuato-truncatis angulo exteriori sat longe dentato, carinis dorsalibus nullis, centro-basalibus juxta basin solum perspicuis ibique valde elevatis, undique disperse punctulatis; tibiis medio griseo-annulatis, tarsorum articulis 1° et 4° griseis; antennis griseo-annulatis.

Long. 6 lin. ♀.

Hab. GUATEMALA, El Reposo (*Champion*).

Three examples.

Var. **congestus.** (Tab. XXIII. fig. 17.)

Differt tantum guttulis elytrorum præcipue in plagas duas transversas laterales congestis.

Hab. PANAMA, Bugaba (*Champion*).

One example only.

LAGOCHIRUS (p. 144).

Lagochirus araneiformis (p. 145).

To the localities given, add:—MEXICO, Cordova, Chiapas (*Sallé*), Almolonga, Merida in Yucatan (*Höge*); GUATEMALA, Las Mercedes, Volcan de Atitlan, Torola, San Isidro, Mirandilla, Pantaleon, El Reposo, Lanquin, Chacoj, Coban, Panima (*Champion*); PANAMA, Caldera in Chiriqui, Bugaba (*Champion*).

A common species throughout our region.

Lagochirus obsoletus (p. 145).

To the localities given, add:—MEXICO, San Blas (*Forrer*), Almolonga (*Höge*), Tehuantepec (*Sumichrast*).

Lagochirus longipennis (p. 145).

To the locality given, add:—MEXICO, Presidio (*Forrer*); GUATEMALA, San Gerónimo (*Champion*).

Lagochirus binumeratus (p. 145).

To the localities given, add :—MEXICO, near the city, Almolonga (*Höge*); GUATEMALA, Capetillo, San Isidro, Cerro Zunil, San Juan in Vera Paz (*Champion*); PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

All Mexican examples I have seen and some Guatemalan ones differ from those found further southward in the tarsi being blackish above with grey pile and fulvous below only, the southern form having fulvous tarsi; this difference is important, as it is one which also differentiates *L. rogersi* from the southern form of *L. binumeratus*. Thomson gives Mexico as the locality of his *L. binumeratus*, so that his phrase "tarsi flavescentes" probably originates in hasty observation, the colour appearing yellowish when viewed sideways. I formerly described the species from Chontales as *L. v-album*, which may now be restored as the name of the Southern form. The two forms may be discriminated as follows:—

1. *L. binumeratus*, Thomson. Tarsi supra nigri, griseo-pubescentes, subtus fulvo-testacei.

   Hab. MEXICO; GUATEMALA, Capetillo.

2. *L. v-album*, Bates. Tarsi supra et subtus fulvo-testacei, articulo 4° apice unguibusque nigris.

   Hab. BRITISH HONDURAS; GUATEMALA; NICARAGUA; COSTA RICA; PANAMA, Chiriqui.

Lagochirus rogersi (p. 146).

To the locality given, add :—COSTA RICA (*Van Patten*); PANAMA, Volcan de Chiriqui (*Champion*).

In this species the tarsi are above black, clothed with grey pile, beneath tawny ashy and partly black, therefore darker than in the Mexican *L. binumeratus*. From the latter *L. rogersi* is distinguished, in most of its examples, by its much larger size, and especially its elongated elytra, and by the whitish letter-like elytral fascia being less definite, running across the elytra and duplicated behind; but some specimens are as small as *L. binumeratus*, and not conspicuously more elongated, and the white marks are sometimes much less developed, so that the species are closely allied.

11. **Lagochirus integer.**

Angustior, elongato-oblongus, fuscus; macula laterali purpureo-fusco velutina valde conspicua, postice vix sinuata ibique cinereo-marginata, cæteris lineis et fasciis obsoletissimis; antennis vix perspicue griseo-annulatis; thorace quam in *L. araneiformi* multo angustiori, tuberibus omnibus sat obtusis, interstitiis grosse punctatis; elytris elongato-oblongis apice rotundatis, fasciculis nigris lineatim seriatis, undique punctulatis, versus basin granulatis; pedibus plerumque castaneis, tarsis supra griseis (articulo 4° nigro), subtus fulvis.

Long. 6–10 lin. ♂ ♀.

Hab. MEXICO, Cordova (*Sallé*); GUATEMALA, Cerro Zunil, Volcan de Atitlan (*Champion*).

Differs from other species in its almost uniform purplish-brown colour, the whitish wavy lines of the elytra in the majority of examples being quite obsolete (except a narrow posterior white border to the conspicuous dark purple-brown lateral spot).

CŒNOPŒUS (to follow the genus *Lagochirus*, p. 146).

Cœnopæus, Horn, Trans. Amer. Ent. Soc. viii. (1880), p. 117.

One species only of this distinct genus, allied to *Lagochirus*, is at present known. It seems confined to Arizona and the neighbouring Mexican border-land.

1. Cœnopœus palmeri.

Leptostylus palmeri, Leconte, New Species N. Am. Col. p. 233 (1873).
Cœnopœus palmeri, Horn, loc. cit. p. 118, t. 2. fig. 1[1].

Hab. NORTH AMERICA, Arizona[1].—MEXICO, Northern Sonora (*Morrison*).

LEPTOSTYLUS (p. 146).

Leptostylus hilaris (p. 147).

To the locality given, add:—MEXICO, Cordova (*Sallé*); PANAMA, Volcan de Chiriqui, Bugaba, David (*Champion*).

Leptostylus viridescens* (p. 148).

To the locality given, add:—MEXICO, Jalapa (*Höge*), Cordova, Juquila (*Sallé*).

Leptostylus cineraceus (p. 148).

To the locality given, add:—GUATEMALA, San Isidro (*Champion*).

Probably only a variety of *L. gibbulosus*, from which it differs in the much depressed centro-basal tubers, which are not darker in colour than the rest of the elytra, as in *L. gibbulosus*.

Leptostylus hispidulus (p. 150).

To the localities given, add:—GUATEMALA, Torola (*Champion*).

In fresh examples there is on the elytra, preceding the curved fascia, an oblique dusky bar; both are margined anteriorly with lighter fuscous.

Leptostylus gibbulosus (p. 150).

To the localities given, add:—GUATEMALA, Chacoj in Vera Paz (*Champion*); PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

The large series of examples show scarcely any trace of the usual large, brown, lateral

* The name of this species is misprinted *L. viridescen* on p. 148.

stigma of the elytra, the absence of which is an important specific character of this species and its supposed var. *L. cineraceus*. The faint blackish streak on the disc behind the middle and near the suture in most examples is reduced to a rounded spot, which is followed by a transverse common spot of a lighter ashy than the ground-colour. The antennæ and part of the elytra are often very pale green.

Leptostylus lævicauda (p. 150).

To the locality given, add:—GUATEMALA, Volcan de Atitlan, Mirandilla, Las Mercedes, Cerro Zunil (*Champion*).

Add the following colour variety:—

Var. *L. chiriquinus*. Elytra ante fasciam atro-fusca, griseo et fulvo variegata.

Hab. PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

This species is remarkable for the centro-basal ridges being elevated up to the base of the elytra on each side of the scutellum, and each having two tufts of hair.

Leptostylus obliquatus (p. 150).

To the Mexican localities given, add:—Almolonga (*Höge*); NICARAGUA (*Sallé*).

This species, *L. lævicauda*, and *L. notaticollis*, resemble each other very much in general colour and in the oblique (from the suture backwards) pale elytral fascia. *L. notaticollis* differs from the other two by its very much smaller size and the much rougher tuberculation of the elytra.

Leptostylus pygialis (p. 151).

To the locality given, add:—PANAMA, Bugaba (*Champion*).

Leptostylus cristulatus (p. 151).

To the locality given, add:—PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

Leptostylus leucopygus (p. 151).

To the locality given, add:—PANAMA, Bugaba (*Champion*).

Leptostylus trigonus (p. 152).

To the locality given, add:—GUATEMALA, Cerro Zunil, Volcan de Atitlan (*Champion*); PANAMA, Volcan de Chiriqui (*Champion*).

29. **Leptostylus præmorsus.**

Lamia præmorsa, Fabr. Ent. Syst. 1, ii. p. 275[1].

Hab. MEXICO, Cordova (*Sallé*).—WEST INDIES, Guadeloupe[1].

Compared with numerous specimens from Guadeloupe, the single example in the Sallé collection offers no other difference except its relatively rather shorter elytra.

30. **Leptostylus albescens.** (Tab. XXIII. fig. 18.)

L. pulcherrimo quoad colores similis. Sat elongatus, supra cinereo-albus (certo situ fulvescens); elytris maculis lateralibus duabus nigris (altera mediana magna postice viridi-ænea, altera minori ante apicem) lituraque nigra triangulari communi suturali versus apicem; thorace maculis elongatis basi quatuor, juxta marginem anticam duabus minoribus, nigris, tuberculis 5 disci valde elevatis, altera utrinque laterali acuta; elytris juxta apicem angustatis, apice oblique truncatis, angulo exteriori sat producto, dorso fasciculis altis lineatim digestis cinereo-albis, carinisque centro-basalibus validis; corpore subtus nigricanti; antennis articulis 1°, 3° et 4° griseo- et nigro-maculatis, 5°–11^{m} nigris basi griseis; pedibus cinereis, femorum clava basi nigra, tibiis annulis duobus nigris; tarsis nigris, articulis 1° et 2° griseis.
Long. 6 lin.

Hab. PANAMA, Volcan de Chiriqui (*Champion*).

One example. Resembles *L. pulcherrimus* in colour, but the black marks are not in the same position, and its nearest ally is the differently-coloured *L. subfurcatus*.

31. **Leptostylus diffusus.** (Tab. XXIII. fig. 19.)

L. cineraceo affinis et quoad formam simillimus sed aliter coloratus. Ovatus, convexus, cinereo-albus; elytris medio litura circumflexa-**Λ** communi, pone hanc fascia lata (marginem haud attingente) maculaque utrinque transversali prope apicem, olivaceo-fuscis sericeis, stigmate grandi laterali subobsoleto; thorace disco 5-tuberculato (tuberculo mediano-posteriori longiori et validiori), tuberculis lateralibus parvis; elytris convexis valde inæqualibus, grosse punctatis et aspere tuberculato-fasciculatis, apice integris; antennis testaceis scapo griseo, articulis 3°–4^{m} fusco-piperitis, 3°–11^{m} apice fuscis.
Long. $4\frac{3}{4}$ lin.

Hab. MEXICO, Cordova (*Sallé*); GUATEMALA, Torola (*Champion*).

32. **Leptostylus retrorsus.** (Tab. XXIII. fig. 20.)

L. diffuso proxime affinis et simillimus, sed differt elytrorum macula circumflexa retrorsa **V**.
Long. $4\frac{3}{4}$ lin.

Hab. PANAMA, Volcan de Chiriqui (*Champion*).

33. **Leptostylus signaticauda.** (Tab. XXIII. fig. 21.)

L. aculifero (Say) affinis et subsimilis; differt *inter alia* elytris apice litura communi griseo-alba **V**-formi; obscure fuscus vel viridescenti-fuscus, elytris fascia post medium apud suturam dilatata (sæpissime obsoleta) maculaque constanti apicali **V**-formi, griseo-albis; thorace dorso 5-tuberculato, tuberculis lateralibus nullis, interstitiis crebre punctato; elytris valde inæqualibus, dorso carinatis et tuberculis fasciculisque asperatis, tuberibus centro-basalibus magnis, sat elevatis et multituberculatis, apice angustatis et oblique truncatis; antennis testaceo-griseis, articulis apice nigris, articulis 3° et 4° fusco-piperitis, scapo quam in *L. aculifero* longiori et graciliori.
Long. $3\frac{1}{2}$–$4\frac{1}{2}$ lin.

Hab. BRITISH HONDURAS (*Blancaneaux*); GUATEMALA, Cerro Zunil, Las Mercedes (*Champion*).

A large number of examples. The postmedian fascia of the elytra is in no specimen more than a narrow streak with a spot-like dilatation on the suture; and, like the

apical double-virgule, it is grey or bluish-white, spotted with the dark brown elytral punctures. The short fascicles of bristles are all black, and the usual lateral black spot is wanting.

34. **Leptostylus fuligineus.** (Tab. XXIII. fig. 22.)

L. signaticaudæ affinis, quoad formam et sculpturam simillimus; differt tantum colore fuligineo-fusco, elytris apice immaculatis, et utrinque haud procul ab apice juxta suturam macula nigro-velutina ante quam maculis vagis (interdum obsoletis) cinereis. Antennæ discrepant, articulis 1°–5^{m} griseis nigro-piperitis, 6°–10^{m} nigris, singulis medio annulo angusto nigro. Tarsi nigri.

Long. $3\frac{1}{2}$–$4\frac{1}{2}$ lin.

Hab. GUATEMALA, Quiche Mountains 7000–9000 feet (*Champion*).

On the small branches of fallen pine-trees (*Champion*).

35. **Leptostylus phrissominus.** (Tab. XXIII. fig. 23.)

Gen. *Phrissomæ* haud dissimilis; *L. notaticolli* affinis. Breviter oblongus, ochraceo-fuscus sericeo-nitens, litura tenui communi suturali versus apicem nigra elytrisque lateribus versus basin fuscescentibus; antennis articulis 1°, 3° et 4° fusco-piperitis, 3°–5^{m} apice nigris, 6°–10^{m} nigro-fuscis medio ochraceo-annulatis; thorace multituberoso, apud marginem posticum utrinque maculis duabus nigris, exteriori (sicut in *L. notaticolli*) multo majori; elytris valde inæqualibus, aspere et valde tuberculatis (tuberculis unisetiferis nec fasciculatis), basi utrinque gibbosa medio depressis, ante declivitatem posteriorem iterum convexis, apice angustis oblique truncatis, planatis; tarsis nigris.

Long. 4–$4\frac{1}{2}$ lin.

Hab. PANAMA, Volcan de Chiriqui (*Champion*).

36. **Leptostylus zonatus.** (Tab. XXIII. fig. 24.)

L. aculifero (Say) affinis et quoad formam sculpturamque similis; differt colore purpureo-fusco fasciaque posteriori elytrorum recta integra lataque ochracea. Oblongus; thorace dorso plurituberoso, tuberculo laterali magis producto et acuto; elytris apice integris, tuberibus centro-basalibus magnis, tuberculatis pone tubera oblique impressis, carinulis dorsalibus minus elevatis, tuberculato-fasciculatis, declivitate posteriori sublævi; antennis longioribus et gracilioribus, fuscis, articulis 1°, 3° et 4° griseo-piperitis, cæteris sequentibus basi griseis; femoribus posticis intus griseo-variegatis.

Long. $3\frac{1}{2}$ lin.

Hab. PANAMA, Volcan de Chiriqui (*Champion*).

The ochraceous-ashy fascia at the commencement of the posterior declivity of the elytra is straight and unusually well defined, contrasting strongly with the uniform purple-brown colour of the rest of the surface. In a natural position of the legs the colour of the fascia is seen to be continued to the inner side of the femora. The tubercles of the elytra are not pointed or much elevated, nor are they furnished at their summits with fascicles of bristles, as usual in the genus.

37. **Leptostylus albicinctus.** (Tab. XXIII. fig. 25.)

L. viridescenti affinis, sed differt corpore latiori et magis oblongo-quadrato nec anguste ovato, fascia albo-cinerea multo latiori et declivitate posteriori fulvo-ochracea, apice immaculata. Quoad formam *L. aculifero* similis, sed minus elongatus, fulvo-fuscus, thorace subcinereo, elytris interdum hic illic viridi-æneo-tinctis; thorace

sat valide tuberoso, tuberculis lateralibus haud productis; elytris valde inæqualibus, tuberibus centro-basalibus quam in *L. viridescenti* magis elevatis, fasciculis setorum hispidis, fasciculis posterioribus antice albo-cinereis, fascia lata albo-cinerea longe post medium utrinque ad latera dilatata et postice prolongata, stigmate laterali nigro-fusco, fere obliterato, angusto; antennis sicut in *L. viridescenti* articulis 3°–5^{m} fusco-piperitis, cæteris griseis, apice nigris.

Long. $3\frac{1}{2}$–$4\frac{1}{4}$ lin.

Hab. Mexico, Cordova (*Sallé*), Cerro de Plumas (*Höge*).

Larger tawny or ashy-brown examples are easily distinguishable from *L. viridescens* by the colour and the broader and more quadrate form of body, typical *L. viridescens* being narrowly ovate and tinted greenish throughout the entire upper surface.

38. **Leptostylus x-griseus.** (Tab. XXIV. fig. 1.)

Elongato-ovatus, paullo minus convexus, fuscus; elytris nigro-fasciculatis, tuberibus centro-basalibus nullis, plaga magna communi, versus scutellum dilatata postea angustata, deinde post medium valde dilatata et utrinque oblique versus marginem lateralem extensa, grisea; thorace tuberculis 5 dorsalibus validis, lateralibus sat elevatis, obtusis; elytris postice curvatim angustatis, apice brevissime oblique truncatis, undique sat regulariter discrete punctatis absque carinis; antennis articulis testaceo-griseis, apice fuscis, articulis 1°, 3°–6^{m} fusco-piperitis; tarsis fuscis, articulis 1° basi, 4° toto, testaceo-griseis.

Long. $3\frac{1}{3}$ lin.

Hab. Guatemala, Chacoj in Vera Paz (*Champion*).

39. **Leptostylus quintalbus.** (Tab. XXIV. fig. 2.)

L. leucopygo proxime affinis; thorace simillimo, lateribus obtusis dorso tuberculis tantum duobus anterioribus; elytris triente apicali ochraceo, antice flexuose delimitato nec arcuato; differt antennarum coloribus, viz. articulis 1°–4^{m} nigris basi testaceis, 5° toto albo, 6°, 7°, 9°–11^{m}, toto nigris, 8° et 10° albis basi nigris. Breviter ovatus, valde convexus, postice abrupte declivis, fulvo-fuscus, thorace, disco elytrisque triente apicali ochraceis; elytris tuberibus centro-basalibus elevatis utrinque bicristatis, grosse punctato-striatis, interstitiis nonnullis angustis et elevatis, fasciculis paucis; tibiis et tarsis rufo-testaceis, illis apice nigris.

Long. $1\frac{3}{4}$–2 lin.

Hab. Panama, Bugaba (*Champion*).

40. **Leptostylus petulans.**

L. quintalbo affinissimus, sed differt tuberculo utrinque centro-basali unico valde elevato et penicillato; quoad colores antennarum et corporis simillimus, sed area elytrorum apicali paullo obscuriori et antice fascia angusta recta albo-cinerea delimitata; elytris post tubercula centro-basalia transversim depressis, dorso posteriori valde convexo ibique interstitiis alternis valde elevatis et penicillatis.

Long. $1\frac{1}{4}$–2 lin.

Hab. Panama, Volcan de Chiriqui (*Champion*).

This and the preceding species, with *L. leucopygus*, *L. orbiculus*, and *L. pilula*, form a well-marked section of the genus; they are all closely allied to *L. macula*, Say.

41. **Leptostylus ochropygus.**

L. pygiali affinis, sed *L. leucopygo* similis a quo differt *inter alia* plaga elytrorum ochracea apicali majori antice fere recta (nec curvata). Parvus, breviter ovatus, declivitate posteriori minus abrupta et apice magis pro-

longata; ochraceo-fuscus, elytris fere dimidio posteriori pallidius ochraceo, litura utrinque anteapicali fusco-nigra, punctato-striatis, interstitiis alternis paullo elevatis et fasciculatis; thorace fulvo, tuberculis 5 dorsalibus parvis, lateralibus sat prominulis; antennis griseo-testaceis, articulis apice fuscis, 1°, 3° et 4° fusco-piperitis; tibiis et tarsis nigris, illis annulis 2 griseis, harum articulo 4° basi testaceo.

Long. 2 lin.

Hab. GUATEMALA, Volcan de Atitlan, San Gerónimo, Capetillo, Cerro Zunil (*Champion*).

Certainly distinct from *L. leucopygus*, in which the anterior margin of the grey apical area is arcuated. The thorax also is different in outline, the sides being much narrowed and sinuated behind the prominent lateral tubercles. In *L. leucopygus* the thorax has the same form as in *L. macula*, Say, viz. with feebly rounded sides, and more narrowed in front than at the base.

42. **Leptostylus angulicollis.**

Parvus, ovatus, minus convexus, fuscus, elytris tuberculis parvis nigro-pubescentibus in series abbreviatas utrinque quatuor ordinatis, tuberculo centro-basali compresso nigro-cristato, stigmateque laterali curvato, nigro, et lituris indistinctis submedianis canis; thorace lato et brevi, tuberculo laterali post mediano magno obtuse conico, dorso obtusissime tuberculato; antennis articulis 1° griseo, 3°–5^{m} testaceis fusco-piperitis apice nigris, 6°–10^{m} pallide-testaceis apice nigris, 11° nigro; elytris apice breviter oblique truncatis; pedibus griseis, tibiis nigro-biannulatis, tarsis nigris articulo 1° basi griseo.

Long. $2\frac{1}{4}$–$2\frac{1}{2}$ lin.

Hab. GUATEMALA, Pantaleon (*Champion*).

A dwarf species allied to *L. lævicauda* and *L. pleurostictus*, but distinguished by the large, broad, conical lateral tubercles of the thorax and the rows of small, rounded, black, pubescent tubercles of the elytra.

43. **Leptostylus ——?**

Hab. PANAMA, Tolé (*Champion*).

A single example, much abraded, allied to *L. cineraceus*, but showing a transverse arcuated grey fascia midway between the middle and apex of the elytra, which seems to indicate a species different from any of the foregoing.

44. **Leptostylus ——?**

Hab. PANAMA, Volcan de Chiriqui (*Champion*).

A single very imperfect specimen.

45. **Leptostylus dubitans.**

Leiopo nœviicorni similis a quo differt thorace tuberculo laterali submediano conico, mesosterno latiori et quadrato, etc. Anguste oblongo-ovatus, obscure fuscus; elytris post medium fascia antice ad suturam acute angulata alteraque simili multo angustiori prope apicem, cinereo-albis, elytris tuberculis nonnullis parvis setiferis seriatim ordinatis, centro-basalibus haud elevatis; antennis testaceo-rufis, articulis omnibus apice fuscis,

1°–4ᵐ fusco-marmoratis; thorace tuberculo lato conico paullo elevato mox pone medium, lateribus post tuberculum perparum sinuatis; elytris mediocriter convexis, apice brevissime transversim truncatis; epipleuris verticalibus; mesosterno lato, quadrato, prosterno acetabulo paullo angustiori.
Long. $3\frac{1}{2}$ lin.

Hab. MEXICO (*coll. Bates*).

One example. An aberrant member of the genus, approaching *Leiopus*, especially the American species allied to *L. alpha*. The fifth antennal joint is much shorter than the fourth, the remaining joints slightly and gradually diminishing in length.

46. **Leptostylus incertus.**

Œdopeza incerta, ante, p. 176.

Belongs to the same group as the preceding species; the pro- and mesosternum are equally broad. The first and third antennal joints are marbled brown and grey. The centro-basal tubercles of the elytra are slightly elevated and pubescent, but the smaller dusky tubercles arranged in rows are scarcely elevated and naked. The basal joint of the hind tarsi is as long as the second and third taken together.

47. **Leptostylus aspiciens.** (Tab. XXIV. fig. 3.)

L. maculæ (Say) quoad formam, convexitatem, etc. similis, sed paullo breviter ovatus; subochraceo-fuscus, atro-fusco guttulatus, elytrisque utrinque post medium macula transversa ovata (marginem fere attingente, a sutura longe distante) velutino-nigra ochraceo-marginata; capite, oculis antennisque fere sicut in *L. macula*, his vero fusco-nigris, articulis 3° et 4°, 5°, 7° et 9° dimidio basali carneo-testaceis, scapo apice infra acute subproducto, articulis a 5° abbreviatis, 10° et 11° brevissimis; thorace pone medium leviter rotundato-dilatato, dorso æquali, punctato; elytris apice juxta suturam brevissime ac obtusissime truncatis, guttis nonnullis, dorso perspicue tuberculatis; sternis pedibusque quoad formam sicut in *L. macula*.
Long. $3\frac{1}{4}$ lin.

Hab. MEXICO, Cordova (*Sallé*).

One example only. Belongs to the same group as *L. macula*, *L. leucopygus*, and allies; but the elytra marked with two large eye-like spots, similarly to *Nyssodrys binoculata* and *Priscilla hypsiomoides*.

TRICHALPHUS (p. 153).

Trichalphus pilosus (p. 153).

To the Guatemalan locality given, add:—Torola (*Champion*).

ALPHINELLUS (p. 153).

4. **Alphinellus carinipennis.**

A. gibbicolli affinis; differt *inter alia* thorace antice mediocriter convexo ibique obtuse bituberculato. Cylindrico-ovatus, terreno-fuscus, interdum linea dorsali thoracis, nebulaque vaga utrinque subdiscoidali elytrorum, albo-cinereis; capite inter antennas concavo; thorace fere sicut in *Leiopo* subtrapezoidali, spina

laterali prope basin acuta, deinde valde sinuato-angustato usque ad basin, dorso antico mediocriter convexo obtuse bituberculato, tota superficie sat confertim punctulato, fulvo-fusco, vittis indistinctis nigro-fuscis 4 et interdum linea dorsali cinerea; elytris postice convexioribus declivitate posteriori sat abrupta, crebre sed discrete, hic illic sublineatim, punctatis, apice brevissime oblique truncatis, tuberibus centro-basalibus parum elevatis obtuse bicarinatis (carina interiori minori interdum subobsoleta), disco posteriori utrinque carina abbreviata medio interrupta et interdum penicillata, carinisque lateralibus utrinque tribus longioribus flexuosis; antennis obscure fuscis, scapo subcylindrico spinam thoracis haud attingente, articulis 3°–11^{m} basi rufo-testaceis, 4° prope apicem testaceo-annulato.

Long. $2\frac{1}{4}$–$3\frac{1}{4}$ lin.

Hab. Mexico, Cordova, Jalapa (*Höge*).

ELEOTHINUS (p. 154).

This genus is evidently equivalent to the North-American group of *Leiopus* defined by Dr. Horn (Trans. Amer. Ent. Soc. viii. p. 124) as embracing *L. wiltii*, *L. crassulus*, and *L. fascicularis*. It seems to me sufficiently different from the type of *Leiopus* (the European *L. nebulosus*) to justify generic separation. I find, however, that the third species I referred to the genus, viz. *E. comus*, does not belong to it; besides the long, erect, soft hairs with which its elytra are clothed, it differs in its extremely narrow pro- and mesosternum, in which it resembles *Lepturges*; it will be found further on, under the genus *Eutrichillus*.

Among Mr. Champion's later captures is a small Longicorn, of shorter ovate form than the North-American *Eleothini*, which bears the closest possible resemblance in general form and colours to many *Leptostyli*, but is evidently much nearer *Leiopus*. Although its antennæ are much longer and finer, and the short hair-tufts of the elytra are reduced to a scarcely perceptible black pubescence on the narrow centro-basal tubercles, I here describe it as an *Eleothinus* (*E. pygmæus*).

Eleothinus abstrusus (p. 154).

To the locality given, add:—Nicaragua, Chontales (*Janson*).

3. **Eleothinus (?) pygmæus.** (Tab. XXIV. fig. 4.)

Breviter oblongo-ovatus, fulvescenti-fuscus, thorace disco nigro-fusco maculato; elytris stigmate laterali guttulisque seriatis nigro-fuscis lineis nonnullis et interdum fascia angusta, valde obliqua (a sutura retrorsum usque ad marginem), albo-griseis; fronte convexa; thorace brevi et lato, spina valida, acuta paullo ante basin, lateribus oblique usque ad spinæ apicem rectis, post spinam sinuatis (haud obliquis); elytris convexis, apice breviter oblique truncatis vel rotundatis, tuberculis cariniformibus centro-basalibus vix elevatis breviter nigro fasciculatis; antennis quam corpus duplo longioribus, pallide-testaceis, articulis (3°–11^{m} subæqualibus) apice nigro-fuscis, scapo fusco-piperito subtus parum planato nec flexuoso; pedibus fuscis, femoribus crasse clavatis, basi tibiisque apice testaceo-rufis; tarsis posticis sicut in *Leptostylis* brevibus; pro- et mesosterno quam in *L. fasciculari* paullo latioribus, hoc postice vix angustato.

Long. $1\frac{1}{4}$–$1\frac{3}{4}$ lin.

Hab. Guatemala, Pantaleon, Torola (*Champion*); Panama, Bugaba, Tolé (*Champion*).

LEIOPUS (to follow the genus *Eleothinus*, p. 155).

Leiopus, Serville, Ann. Soc. Ent. Fr. 1835, p. 86.
Sternidius, Leconte, Smithson. Misc. Coll. 265 (Class. Col. N. A. part 2, May 1873), p. 338 (partim).
Liopus, Horn, Trans. Amer. Ent. Soc. viii. (1880), p. 123 (partim).

Excluding the species with hair-tufts on the elytra, this genus is taken here as defined by Dr. Horn. It comprehends those allies of the type *Leiopus nebulosus* of Europe which have a very narrow prosternum, a mesosternum of very moderate width, oblong, more or less narrowed behind, and hind tarsi of short or medium length, in which the basal joint is as long as or a little longer than joints 2 and 3 taken together. As thus defined, it comprises a small number of described species from the North Temperate zone of both the Eastern and Western hemispheres.

The following species are somewhat aberrant, but agree better with *Leiopus* than with *Nyssodrys* or any other allied genus.

1. **Leiopus næviicornis.**

L. alphæ (Say) affinis. Obscurius fuscus, thorace vittis duabus antice convergentibus atro-fuscis; elytris post medium utrinque (fere sicut in *L. alpha*) fascia abbreviata valde obliqua atro-fusca antice cinereo-marginata; antennis rufo-testaceis, articulis apice nigro-fuscis, 1°–8^{m} griseo- et fusco-piperitis; thoracis spina laterali acuta ante basin sita, lateribus anticis recte obliquis, post spinam sinuatis; elytris apice breviter obtusissime truncatis, dorso guttis nonnullis nigro-fuscis lineatim digestis haud perspicue elevatis; mesosterno quam in *L. nebuloso* et *L. variegato* distincte latiori postice valde angustato.
Long. 3 lin.

Hab. MEXICO, Cordova (*Sallé*), Jalapa (*Höge*).

2. **Leiopus** —— ?

Hab. MEXICO, Ventanas (*Forrer*).

A single imperfect specimen of a species evidently very distinct from the foregoing.

3. **Leiopus** —— ?

Hab. MEXICO, Cordova (*Sallé*).

Distinct from both the preceding. A single example, very imperfect.

ALCIDION (p. 156).

Alcidion eulophum (p. 156).

To the locality given, add:—MEXICO, Jalapa (*Höge*); GUATEMALA, San Gerónimo, Purula, Las Mercedes, Panajachel (*Champion*); COSTA RICA (*Van Patten*).

Varies in size from 3 to 6 lines. A common species in Guatemala.

Alcidion privatum (p. 157).

To the localities given, add:—GUATEMALA, Volcan de Atitlan (*Champion*); PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

All the examples from Guatemala and Nicaragua differ from those from the State of Panama in the centro-basal ridges of the elytra being very slightly elevated, but crested with a pencil of very long hairs. Those from Panama have a strongly elevated compressed ridge fringed at the summit with very short hairs; these agree better with Pascoe's description of *A. privatum* from Santa Marta. In colours and markings the two forms offer no difference.

The two forms may be separated as follows:—

A. privatum, Pascoe.

Hab. PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).—SOUTH AMERICA, Colombia.

A. privatum, var. *penicillare*.

Hab. GUATEMALA; NICARAGUA.

In both forms the anterior tibiæ of the male are bisinuous on their inner edge, with a more or less prominent tooth between the two sinuations. This structure (observable in a less degree in other species of the genus) is seen in a still more developed state in *A. brachiale*, which is easily distinguishable from *A. privatum* by the short black oblique macular fascia behind the middle of the elytra.

The scape in all three forms is very strongly flexuous beneath and hairy.

Alcidion brachiale (p. 157).

To the localities given, add:—GUATEMALA, El Tumbador (*Champion*); PANAMA, Volcan de Chiriqui (*Champion*).

8. **Alcidion lineatum.**

Alcidion lineatum, Bates, Ann. & Mag. N. H. ser. 3, xii. p. 105, nota [1].

Hab. PANAMA, Volcan de Chiriqui (*Champion*).—SOUTH AMERICA, Venezuela [1].

In this species the mesosternum is convex and carinated down the middle.

XENOSTYLUS (to follow the genus *Alcidion*, p. 157).

Gen. *Alcidio* subsimilis, sed differt antennis elongatissimis gracilibus, scapo valde elongato versus apicem clavato, articuloque 3° (♂) subtus apice ramulo corneo emittente. Corpus elongatum, postice recte attenuatum, absque setis. Frons subplana; oculi magni, grosse granulati, lobo inferiori elongato-oblongo. Thorax inermis, transversus, lateribus post medium rotundatis. Elytra elongato-trigona, apice singulatim rotundata, dorso a basi usque ad apicem declivi, carinula centro-basali parum elevata nuda. Antennæ (♂) corpore duplo longiores, tenues, nudæ; scapo valde elongato longe ultra humeros attingente, subtus subflexuoso, sed intus versus apicem paullo dilatato; articulo 3° quam cætera multo longiori, apice intus (♂) processu angusto torto, emittente; 4°–11^{m} gradatim paullo crescentibus. Pedes sat elongati; femora pedun-

culata gradatim clavata. Tarsi postici elongati, articulo 1° cæteris 3 conjunctis subæquali. Pro- et mesosternum lata, hoc latiori subquadrato.

♂. Abdomen segmento terminali dorsali angusto emarginato, ventrali latiori latiusque emarginato.

♀. Ovipositor ultra elytrorum apices prolongatus planus, segmento dorsali lanceolato, ventrali apice obtuso.

The slender slightly twisted horny process at the tip of the third antennal joint exists only in the larger well-developed individuals; in those of intermediate size it is rudimentary, and in still smaller individuals quite absent. It is longer and narrower than the similar process on the sixth joint in *Lagochirus*, and destitute of hairs.

1. **Xenostylus sublineatus.** (Tab. XXIV. fig. 5.)

Obscure castaneo-fuscus; elytris sutura, margine laterali lineisque discoidalibus 2–3, obscure griseis; thorace disco antice obtuse bituberculato, medio plano; elytris punctulatis versus apicem et lineis utrinque duabus lævibus.

Long. $2\frac{3}{4}$–4 lin.

Hab. PANAMA, Volcan de Chiriqui (*Champion*).

LOPHOPÆUM (p. 159).

Lophopæum saronotum (p. 159).

The original description of this species was drawn up from a single specimen from Chontales, which seems to be defective in coloration and in the clearness and depth of the black markings of the elytra and legs. The following emended description is therefore necessary:—

Elongatum postice angustatum, nigrum, tomento subtili olivaceo-griseo vestitum, thorace nigro-irrorato maculisque utrinque nigris basalibus majoribus, elytris nigro guttatis, post medium maculis sex nigris cano-marginatis, in fascias transversas 3 et 3 dispositis, femorum pedunculis, tibiis annulo mediano, tarsorumque articulis 1° basi et 4° toto pallide-testaceis, antennis articulis 3°–11^{m} basi anguste testaceis (scapo subtus valde biflexuoso haud ciliato); occipite fulvescenti maculis medio duabus nigris; thorace paullo post medium tuberculo conico (interdum apice obtuso), lateribus post tuberculum valde sinuatis, parum angustato; elytris sat confertim sed discrete punctatis, haud carinatis, apice angustis breviter oblique truncatis, utrinque tuberculo centro-basali obtuso longe nigro-penicillato; pedibus elongatis, tarsis posticis gracilibus.

Long. $3\frac{1}{2}$–5 lin.

Hab. NICARAGUA, Chontales (*Belt*); PANAMA, Volcan de Chiriqui (*Champion*).

5. **Lophopæum w-flavum.** (Tab. XXIV. fig. 6.)

L. saronoto proxime affine; differt elytris pone medium litura W-formi ochracea, etc. Oblongo-ovatum, postice angustatum, nigrum, fulvo-griseo subtiliter tomentosum, fronte nigro-fusca, occipite nigro bimaculato; thorace guttis maculisque utrinque basalibus majoribus nigris, tuberculis dorsalibus duobus nigris, tuberculo laterali mediano lato acute-conico; elytris undique discrete punctatis, absque carinis, tuberculo centro-basali parum elevato longe nigro-penicillato, nigro-guttatis, pone medium litura majori, versus apicem litura minori W-formibus, ochraceis late nigro-marginatis juxta apicem macula nigra, apice breviter oblique truncatis; antennis testaceo-rufis, articulis 3°–11^{m} apice breviter fuscis: pedibus rufo-testaceis, femorum clavis, tibiarum annulis duobus tarsisque medio, fuscis.

Long. $4\frac{1}{2}$ lin.

Hab. PANAMA, Volcan de Chiriqui (*Champion*).

6. **Lophopæum spinipenne.** (Tab. XXIV. fig. 7.)

L. scopifero quoad colores simile, sed valde differt elytris apice longe spinosis. Oblongo-ovatum, longe erecte setosum, atro-fuscum, elytris dimidio apicali fulvo-fusco litura communi W-formi post medium guttulisque, nigris; antennis tenuibus (♂) quam corpus duplo longioribus, scapo, articulisque 3°–5ᵐ basi, piceo-rufis; thorace spina laterali mediana elongata acuta, dorso bituberculato, fulvo-fusco marmorato; elytris apice late recte truncatis angulo exteriori in spinam acutam valde elongatam prolongato, tuberculis centro-basalibus elongatis interdum compressis nigro-penicillatis; pedibus sat elongatis; femoribus basi testaceo-rufis, clavis nigris, rufo-maculatis; tibiis nigris annulo medio rufescenti; tarsis rufescentibus, articulo 1° apice, 2° et 3° toto fusco-nigris.

Long. 3–4¼ lin.

Hab. PANAMA, Bugaba (*Champion*).

LEPTOCOMETES (p. 161).

The following species differs from the type (*L. hispidus*) in the thoracic spine being behind the middle of the side, though distant from the hind margin. The dorsal surface of the thorax is tuberculated as in *L. hispidus*, but the centro-basal tubercles of the elytra are penicillated, and the hind femora shorter. The width of the pro- and mesosternum is nearly the same in both species, that of the mesosternum being nearly as in *Leiopus nebulosus*.

2. **Leptocometes curvatus.**

Species distinctissima. Anguste oblongus, depressus, supra setis elongatis obsitus, fulvo-testaceus, elytris post medium utrinque litura magna longitudinali intus arcuata et medio interrupta nigro-fusca; thorace quadrato, spina laterali postice spectanti ab angulo postico sat distanti, dorso obtuse tuberculato; elytris apice obliquissime sinuato-truncatis, angulo exteriori in spinam producto, epipleuris verticalibus sed haud altis (versus basin infuscatis), tuberculo centro-basali alte nigro-penicillato; antennis fulvis, articulis a 3° basi albo-testaceis; pedibus testaceis fusco-annulatis. Tibiæ anteriores (♂?) sicut in *Alcidion brachiale* intus valde bisinuatæ medio dentatæ.

Long. 3 lin.

Hab. MEXICO, Cordova (*Sallé*).

One example only.

OZINEUS (p. 161).

Ozineus arietinus (p. 161).

To the localities given, add:—GUATEMALA, Cerro Zunil, Senahu (*Champion*); PANAMA, Bugaba, David, Volcan de Chiriqui, Tolé (*Champion*).

3. **Ozineus cribripennis.**

O. ignobili (Bates) proxime affinis et similis, differt elytris crebrius punctulatis et versus apicem prope suturam grossius et sparsius lineatim punctatis. Parvus, ovatus parum convexus, subtiliter griseo-pubescens nigro-irroratus, thoracis disco maculis duabus majoribus elongatis, nigris; thorace sicut in *O. ignobili* brevi et lato et basi transversim sulcato spinis lateralibus juxta angulos posticos sitis; elytris apice oblique sinuato-truncatis angulis externis minus longe productis, tuberculoque centro-basali minus longe nigro-penicillato,

undique confertim sat valde punctulatis, postice versus suturam exceptis sparsim sublineatim punctulatis; antennis (fere sicut in *O. ignobili*) nigris, articulis 3°–11^{m} dimidio basali fulvis; tibiis tarsisque nigris illis dimidio basali, his articulo 1° fulvis.

Long. $2\frac{3}{4}$ lin.

Hab. PANAMA, Volcan de Chiriqui (*Champion*).

Very near *O. ignobilis*, from Rio de Janeiro, in colour and markings, differing only in the thorax having two elongate discoidal black spots and the elytra wanting the irregular median black fascia; but the latter differ perceptibly in punctuation. Both are very closely allied to *O. cinerascens*, which, however, is much more elongate and has a longer and more trapezoidal thorax.

4. **Ozineus angulistigma.** (Tab. XXIV. fig. 8.)

Quoad formam *O. arietino* similis, sed aliter coloratus et signatus. Fuscus, thoracis disco maculis duabus atro-fuscis, elytris atro-fusco guttatis, pone medium fascia angulata communi, fere M-formi, antice vage postice distincte delimitata, albo-cinerea, post fasciam utrinque plaga magna et prope apicem maculis minoribus, atro-fuscis; thoracis spina parva fere recta prope angulum, lateribus ante spinam arcuatis, post spinam haud sinuatis; elytris apice sinuato-truncatis, angulo suturali acuto, exteriori mediocriter producto, tuberculo centro-basali ovato nigro-pubescenti; antennis scapo castaneo, subtus biflexuoso, articulis 3°–11^{m} dimidio basali flavo-testaceis, apicali nigris.

Long. $3\frac{3}{4}$ lin.

Hab. PANAMA, Bugaba (*Champion*).

One example only.

5. **Ozineus mœstus.** (Tab. XXIV. fig. 9.)

O. docto (Bates) proxime affinis, niger; thorace utrinque lituris quatuor, elytris medio fascia valde undulata et interrupta (versus marginem lateralem dilatata) guttisque et literis ante fasciam et prope apicem, albo-cinereis; antennis nigris, articulis a 3° basi fulvo-testaceis, scapo subtus biflexuoso; thorace trapezoideo, spina laterali acuta oblique postice spectanti ante angulum posteriorem; elytris apice sinuato-truncatis, angulo suturali acuto paullo producto, exteriori prolongato, carina centro-basali brevi, elevata, nigro-penicillata, dorso usque medium conspicue sublineatim punctato; pedibus elongatis, nigris, femoribus basi, tibiis annulo mediano, tarsorum articulis 1° (apice nigro excepto) 4°que, fulvo-testaceis.

Long. $3\frac{1}{3}$ lin.

Hab. PANAMA, Bugaba (*Champion*).

EUTRICHILLUS.

Gen. *Ozineo* proxime affinis, a quo differt præcipue elytris pilis elongatis erectis sat dense obsitis. Corpus angustum subdepressum. Thorax spina laterali sat longe ante basin sita, lateribus usque ad spinæ apicem recte obliquis. Elytra longe erecte pilosa, tuberculis centro-basalibus nigro-penicillatis, penicillisque nonnullis dorsalibus, dorso depressa, epipleuris verticalibus sed lateribus haud carinatis. Pedes postici haud elongati, femoribus omnibus sat crasse clavatis. Pro- et mesosternum angustissima, coxis contiguis.

Differs from the nearly allied genus *Ozineus* in the hairy clothing of the elytra and the thicker and more abruptly formed club of the femora, especially of the hind legs.

Both the pro- and the mesosternum are extremely narrow, so that the coxæ are contiguous or nearly so. This last-mentioned character distinguishes it from the genus *Leptocometes*, which has similarly clothed elytra.

1. **Eutrichillus comus.**

Eleothinus comus, ante, p. 155.

ANISOPODUS (p. 162).

Anisopodus phalangodes (p. 162).

To the localities given, add:—GUATEMALA, Volcan de Atitlan (*Champion*); PANAMA, Bugaba (*Champion*).

Anisopodus mexicanus (p. 162).

To the localities given, add:—MEXICO, Jalapa (*Höge*); PANAMA, Bugaba (*Champion*).

Anisopodus hamaticollis (p. 163).

To the localities given, add:—BRITISH HONDURAS, Rio Hondo (*Blancaneaux*); GUATEMALA, Pantaleon (*Champion*); PANAMA, Bugaba (*Champion*).

Anisopodus scriptipennis (p. 163).

To the localities given, add:—PANAMA, Volcan de Chiriqui, Bugaba, Caldera (*Champion*).

Anisopodus argus (p. 163).

To the localities given, add:—PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

Anisopodus pusillus (p. 163).

The original type of *A. pusillus* from the Amazons has pale legs, and the spine of the thorax very close to the hind angle, the side being continuously straight to the tip of the spine. The Central-American species, though very similar in form and in the largish black spots sprinkled over the elytra, differs in the two features just mentioned, and merits a separate name:—

Var. *A. nigrisparsus*. Pedes nigri, femorum pedunculo, tibiis medio tarsorumque articulo 1° (apice excepto) flavo-testaceis. Thoracis spina distincte exstans, sat ante basin sita. Elytra guttis nigris magis insulatis, macula utrinque basali alteraque post medium bene delimitatis.

To the localities given, add:—GUATEMALA, Pantaleon (*Champion*); PANAMA, Bugaba (*Champion*).

Anisopodus pardalis (p. 164).

To the Mexican locality given, add:—Ciudad in Durango (*Forrer*).

This species has the greatest possible resemblance to *Hyperplatys aspersa*, Say, of the United States. It differs, however, in having a distinctly narrower prosternum. Like other species of *Anisopodus* with less elongated hind legs and carinated sides to the elytra, it would be as well placed in *Hyperplatys* as in the present genus.

10. **Anisopodus dispar.** (Tab. XXIV. figg. 10 ♀, 11 ♂.)

Valde elongatus, angustus, depressus, fusco-niger, subtiliter fusco-tomentosus elytrisque plaga communi valde dilacerata, fusco-guttata, basi dilatata, a basi usque ad apicem, guttulisque lateralibus, griseo-albis; capite thoraceque fulvo-griseo tomentosis, hoc trapezoideo medio glabro; antennis fusco-castaneis versus apicem obscurioribus, articulis 3°–8^{m} fusco-nigris; pedibus griseo-nigris, femoribus basi, tibiis (apice excepto) articuloque primo tarsorum rufescentibus; elytris apice profunde sinuato-truncatis, angulo suturali breviter, exteriori elongato-dentatis.

♂. Thoracis spina lateralis juxta basin longissima; femora postica apice subito et valde clavata.

♀. Thoracis spina lateralis brevis, lateribus ante spinam tumidis; femora postica gradatim mediocriter clavata.

Long. $3\frac{1}{2}$–$4\frac{1}{2}$ lin.

Hab. Panama, Bugaba (*Champion*).

The sexual difference in the size and abruptness of the femoral clavæ is noticeable in other species of the genus, but in a much minor degree. In its narrow elongate form, thoracic structure, &c., this species resembles the Amazonian *A. macropus* and *A. elongatus*, Bates.

11. **Anisopodus nigripes.** (Tab. XXIV. fig. 12.)

A. pusillo affinis; differt pedibus, unguibus flavis exceptis, toto nigris. Oblongo-ovatus, depressus, niger, griseo-cæruleo tomentosus; elytris guttis nigris utrinque circiter viginti inspersis, utrinque post medium guttis nonnullis confluentibus sed haud maculam majorem distinctam (sicut in *A. pusillo*, var. *nigrisparso*) efficientibus; thorace spina laterali conica, acuta, exstanti sat ante angulum sita, nigro, vittis tribus griseo-cæruleis; elytris epipleuris subito verticalibus, dimidio basali sat confertim punctulatis, apice minus oblique truncatis, sinuatis, angulo suturali acuto exteriori spinoso; antennis pedibusque nigris, illis ab articulo 3° basi obscure piceo-rufis.

Long. $2\frac{3}{4}$–$3\frac{1}{4}$ lin.

Hab. Panama, Bugaba (*Champion*).

12. **Anisopodus degener.**

Sordide fuscus, thorace vittis tribus abbreviatis griseis; elytris medio dorso cinereo- et griseo-nebulosis, postice plaga magna dilacerata cinereo-strigosa nigro-fusca; thorace post medium tuberculo tumido laterali apice oblique spinoso, post tuberculum lateribus profunde sinuatis; elytris mediocriter elongatis postice attenuatis, sat crebre punctulatis, apice sat late et transverse sinuato-truncatis, angulo exteriori longe et acute dentato; epipleuris verticalibus sed haud carinatis; antennis obscure rufescentibus, scapo articulisque cæteris apice nigro-fuscis; pedibus atro-fuscis, femoribus basi, tibiis annulo tarsisque obscure rufescentibus.

Long. 3–$3\frac{1}{4}$ lin.

Hab. Mexico, Cordova, Jalapa (*Höge*).

In colour and markings much resembling *Lepturges sordidus*, from which it differs in the longer hind legs, produced exterior angle of the elytral truncature, and form of

thorax. The species is one of those which connect the two genera *Anisopodus* and *Lepturges*, the hind legs, though elongated, being much less so than in the typical *Anisopodi*, the hind femora very gradually clavate (thicker in the male than in the female), and the elytral epipleuræ not being separated from the dorsum by a sharp line or carina.

13. **Anisopodus** (?) ——?

Hab. Costa Rica, Rio Sucio (*Rogers*).

One example in a very mutilated condition.

LEPTURGES (p. 166).

Lepturges infilatus (p. 166).

To the localities given, add:—Mexico, Jalapa, Misantla (*Höge*); Guatemala, Torola (*Champion*).

Lepturges sejunctimacula (p. 167).

To the localities given, add:—Guatemala, Torola; Panama, Bugaba (*Champion*).

Lepturges inscriptus (p. 167).

To the localities given, add:—Guatemala, Torola (*Champion*); Panama, Tolé (*Champion*).

Lepturges festivus (p. 167).

To the localities given, add:—Panama, Volcan de Chiriqui, Bugaba (*Champion*).

Lepturges sordidus (p. 168).

To the localities given, add:—Mexico, Jalapa, Cordova (*Höge*).

Lepturges multinotatus (p. 168).

The Cerro Zunil form, whose differential characters are enumerated under the head of this species, proves too constant and distinct to be maintained as only a variety. The locality "Cerro Zunil" must therefore be erased, and a new species distinguished as follows:—

12 a. **Lepturges pallidulus.** (Tab. XXIV. fig. 13.)

L. multinotato proxime affinis, sed minus ovatus, supra magis planatus elytrisque relative longioribus et rectius attenuatis; pallide fulvo-ochraceus, fronte atro-fusca, thorace maculis variabilibus vagis fuscis, elytris vitta marginali basali nigro-fusca, lineolisque disci plurimis præcipue a medio usque ad apicem, interdum autem prope suturam versus basin parum definitis, fuscis; antennis et pedibus pallidis, scapo subtus articulisque 3°–11^{m} apice (angustissime) fuscis, femorum clavis indistincte fusco-annulatis, tibiis apice, articulis tarsorum

2°–3ᵐ et 1° et 4° apice, nigro-fuscis; thorace lato trapezoideo, spina valida acuta retrorsum oblique spectanti, inter spinam et basin valde sinuato, sulco basali punctato; elytris apice oblique sinuato-truncatis, angulo suturali subrecto, exteriori late dentiformi.

Long. 2–3¼ lin.

Hab. GUATEMALA, Cerro Zunil (*Champion*).

The form of the thorax and the colour of the antennæ and legs are nearly the same as in *L. multinotatus*; but the colour and markings of the elytra in the latter are constantly different, the spots on a grey ground being much more clearly defined, short, and oblong, very numerous, widely separated on the anterior part of the disc, but more or less confluent on the sides and towards the apex.

Lepturges laticollis (p. 169).

To the localities given, add:—GUATEMALA, Volcan de Atitlan, Pantaleon (*Champion*); PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

The pretty elytral markings are seen to vary considerably in a long series. In the type form the grey apical area (after the broad dentated black belt) has on each elytron a triangular blackish spot, leaving a grey margin between it and the suture and black belt. The extreme varieties (chiefly from Chiriqui) are:—1, apical area blackish, separated from the deep black belt by a grey fascia; 2, apical area clear ashy-grey. The black belt is sometimes very broad, and then encloses on each elytron a whitish lineole. The size of the species varies from 1 to 1⅔ line.

Lepturges tumidicollis (p. 169).

To the localities given, add:—GUATEMALA, Pantaleon, Volcan de Atitlan (*Champion*); PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

Lepturges mixtus (p. 170).

To the locality given, add:—BRITISH HONDURAS (*Blancaneaux*); PANAMA, Bugaba (*Champion*).

Lepturges stigmaticus (p. 170).

To the localities given, add:—BRITISH HONDURAS, Rio Hondo (*Blancaneaux*); GUATEMALA, Dueñas, Volcan de Atitlan, San Joaquin (*Champion*).

Lepturges tigrellus (p. 171).

To the locality given, add:—BRITISH HONDURAS, Rio Hondo (*Blancaneaux*); GUATEMALA, Pantaleon (*Champion*).

The following is a well-marked variety :—

Var. *L. megaspilus.* Elytra utrinque post medium macula magna paullo obliqua nigra.

Hab. GUATEMALA, Cerro Zunil (*Champion*).

Lepturges navicularis (p. 171).

To the localities given, add :—MEXICO, Jalapa (*Höge*) ; PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

In the Chiriqui examples the two outer grey longitudinal lines of the elytra are well developed, as in those from Chontales.

22. **Lepturges callinus.** (Tab. XXIV. fig. 14.)

L. complanato et *L. amabili* proxime affinis, elytris apice singulatim rotundatis. Anguste oblongus depressus, castaneus griseo-tomentosus, thorace vage nigro-fusco vittato ; elytris macula elongata basali scutellum versus (interdum obsoleta) altera parva humerali, maculisque magnis marginalibus tribus (quarum secunda submediana suturam interdum attingente ibique multo angustata, tertiaque prope apicem rotundata) fusco-nigris ; antennis pedibusque castaneo-rufis vel nigro-piceis ; thorace trapezoideo, spina laterali lata et brevi fere ad angulum posticum sita ; elytris deplanatis subtiliter punctulatis apice singulatim rotundatis vel obtusissime truncatis ; femoribus posticis sublinearibus.

Long. 3–3½ lin.

Hab. GUATEMALA, Cerro Zunil (*Champion*).

In both *L. complanatus* and *L. amabilis*, from the Amazons, the subapical black spot of the elytra is narrow and transverse ; in *L. callinus* it is quite as long as broad, and surrounded by a grey margin. The similarly coloured and closely allied *L. gratiosus* has no separate subapical spot, and is besides distinguished by its much longer, sharply truncated elytra.

23. **Lepturges charicles.**

L. callino simillimus ; sed differt *inter alia* elytris apice sinuato-truncatis. Anguste oblongus depressus, nigro-fuscus, thorace elytrisque dimidio basali rufescentibus, his dimidio apicali cæruleo-griseis, maculis magnis nigris, subbasali et lateralibus, sicut in *L. callino* sed macula subapicali angustiore obliqua.

Long. 2½ lin.

Hab. PANAMA, Volcan de Chiriqui (*Champion*).

24. **Lepturges læteguttatus.** (Tab. XXIV. fig. 15.)

L. sejunctimaculæ affinis et subsimilis, quoad formam simillimus sed elytris aliter signatis. Anguste oblongus parum convexus, tomento compacto carneo-cinereo vestitus, thorace maculis 4, elytrisque maculis oblongis utrinque 8, viz. 1^{a}–3^{m} in linea prope suturam (2^{a} ante, 1^{a} longe post medium), 4^{a}–6^{m} apud marginem lateralem (1^{a} parva humerali, 2^{a} majori ante, 3^{a} minori paullo post medium), 7^{a} discoidali paullo post medium, 8^{a} rotundata vel subtransversa prope apicem, nigris ; antennis apice fuscis, basi rufescentibus articulis apice nigro-fuscis ; pedibus piceo-fuscis, tibiis basi pallidis ; thorace trapezoideo, spina laterali juxta basin retrorsum spectanti ; elytris apice obtusissime oblique truncatis.

Long. 2¼ lin.

Hab. PANAMA, Bugaba (*Champion*).

The discoidal and third marginal spots, or the subapical and third sutural, sometimes touch; otherwise the black spots are remarkably isolated and well defined in this pretty little species.

25. **Lepturges ornatissimus.** (Tab. XXIV. fig. 16.)

Angustus, sublinearis, mediocriter convexus, capite thoraceque nigris, hoc supra griseo-tomentoso vittis elongatis parallelis duabus nigris, elytris flavo-cinereis macula magna circumscutellari, media sutura, fascia lata postmediana (antice arcuata versus marginem utrinque retrorsum flexa ibique angustata), lineola discoidali ante medium alteraque simili prope apicem, lineisque duabus elongatis marginalibus versus basin, nigris; antennis pedibusque nigris, illis articulis a 3° basi obscure rufis, femoribus basi tibiisque basi, rufo-testaceis; thorace trapezoideo, spina ante basin sita lateribus post spinam sinuatis; elytris sat crebre punctatis, apice obtusissime oblique truncatis.

Long. $2\frac{1}{3}$ lin.

Hab. Panama, Volcan de Chiriqui (*Champion*).

The black elytral spots are sharply defined, and form an extremely elegant design well set off against the pale ochreous, compact, silky felt of the rest of the surface.

26. **Lepturges charillus.** (Tab. XXIV. fig. 17.)

L. deliciolo affinis et simillimus, sed differt elytris apice singulatim rotundatis. Anguste oblongo-ovatus, rufescens, cinereo-ochraceo tomentosus, thorace vittis duabus elytrisque utrinque fascia post medium reverso-circumflexa (**V**), macula pyriformi prope scutellum, lineolis tribus parallelis ante medium (interiori brevissima interdum obsoleta) maculaque prope apicem transversa biloba, castaneo-fuscis; thorace late trapezoideo, spina laterali retrorsum spectanti prope basin, lateribus post spinam oblique profunde sinuatis; elytris apice singulatim rotundatis; antennis versus basin pedibusque pallide testaceis, tibiis apice infuscatis.

Long. $1\frac{3}{4}$ lin.

Hab. Panama, Volcan de Chiriqui (*Champion*).

Resembles *L. deliciolus*, from the Amazons, so closely that I should have treated it as only a geographical variety of that species had it not been for the rounded apices of the elytra, these organs in *L. deliciolus* being sharply truncated. The elytral spots are in the same position in both, though slightly different in shape; the spot on each side of the scutellum especially is markedly different; in *L. deliciolus* it is not obliquely ovate, broadened to the base, as in *L. charillus*, but transverse quadrate, distant from the base, and prolonged behind for a short distance down the suture.

27. **Lepturges callizonus.** (Tab. XXIV. fig. 18.)

L. charillo affinis. Anguste oblongo-ovatus, capite thoraceque fusco-nigris, hoc supra margine antico et postico rufescenti dorso griseo-nebuloso; elytris carneo-griseo tomentosis, macula lata triangulari circumscutellari (macula utrinque pallida prope scutellum), fascia integra postmediana (versus margines dilatata) et utrinque post fasciam macula biloba et prope apicem macula parva, castaneo-fuscis, interdum lineolis fuscis inter maculam scutellarem et fasciam castaneis; antennis tenuissimis, quam corpus triplo longioribus, rufo-testaceis, scapo et articulis 3°–6^{m} apice fuscis, 7°–11^{m} toto fuscis; thorace late trapezoideo, spina laterali parum obliqua

lateribusque post spinam sinuatis ; pedibus testaceis plus minusve infuscatis ; elytris apice oblique breviter sinuato-truncatis.

Long. $1\frac{1}{3}$–$1\frac{2}{3}$ lin.

Hab. GUATEMALA, Pantaleon (*Champion*).

28. **Lepturges euprepes.**

Primo intuitu *L. sejunctimaculæ* similis, sed *L. callizono* magis affinis. Elongato-oblongo-ovatus ; supra ochraceo-cinereo dense tomentosus, thorace vittis quatuor nigro-fuscis (lateralibus antice abbreviatis), elytris prope basin fascia valde flexuosa utrinque ab humero usque ad scutellum (maculam rotundam basalem includente), lineolis utrinque tribus post fasciam subparallelis, fascia latiori valde dentata post medium, macula biloba transversa utrinque posteriori guttaque ante apicem, nigro-fuscis, capite ochraceo ; thorace trapezoideo, spina elongata acuta a basi paullo remota, retrorsum obliqua, lateribus post spinam profunde sinuatis ; elytris apice singulatim obtuse rotundatis ; antennis et pedibus obscure rufo-testaceis, tibiis apice tarsisque infuscatis.

Long. $2\frac{1}{2}$ lin.

Hab. MEXICO, Oaxaca ? (*H. Deyrolle in coll. Bates*).

29. **Lepturges histrionellus.** (Tab. XXIV. fig. 19.)

L. callizono affinis, sed paullo major, aliter signatis, etc. Anguste oblongo-ovatus, capite thoraceque nigris, hoc griseo trifasciato ; elytris ochraceo-tomentosis, fascia recta angusta basali rufescenti et pone hanc fascia paullo obliqua ab humero usque ad suturam castaneo-fusca, post medium fascia lata (postice apud suturam valde emarginata) macula magna triangulari utrinque ante medium marginali guttaque mediana prope suturam, nigris, apice post fasciam immaculatis ; antennis piceo-rufis, articulis apice obscurioribus ; thorace trapezoideo, spina laterali vix obliqua subexstanti acuta, lateribusque post spinam oblique sinuatis ; pedibus testaceo-rufis hic illic infuscatis.

Long. 2 lin.

Hab. PANAMA, Bugaba (*Champion*).

One example only. Similar to *L. ornatissimus* in the clearness and beauty of its elytral markings.

30. **Lepturges trivittatus.** (Tab. XXIV. fig. 20.)

L. unilineato proxime affinis et similis ; differt elytris vittis tribus latis apiceque griseis. Oblongus, niger ; thorace testaceo-rufo, elytris vitta communi suturali et utrinque vitta lata discoidali, basi acuminata et longe ante apicem terminata, maculaque triangulari communi apicali, cæruleo-griseis ; antennis pedibusque nigris, illis articulis a 3° basi rufo-piceis, femoribus basi rufo-testaceis ; thorace trapezoideo, spina valide acuta retrorsum spectanti paullo ante basin ; elytris apice brevissime, vix oblique sinuato-truncatis, angulis breviter acute productis.

Long. $2\frac{1}{4}$ lin.

Hab. PANAMA, Bugaba (*Champion*).

31. **Lepturges pluristrigosus.** (Tab. XXIV. fig. 21.)

L. tigrello simillimus, forsan ejus varietas, sed differt antennis et pedibus nigris (illis articulis 5° et 6° basi interdum obscure rufis, femoribus basi flavo-testaceis), elytrorumque punctis nigris contiguis, lineas fere efficientibus. Oblongus, supra flavo-cinereus ; thorace vittis 2 dorsalibus, elytris lineis 7 (1ª prope lineam suturalem solum submaculari) nigris.

Long. $1\frac{1}{2}$–$2\frac{1}{4}$ lin.

Hab. PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

32. **Lepturges literatus.** (Tab. XXIV. fig. 22.)

L. tumidicolli proxime affinis et similis; differt elytrorum fascia obliqua postmediana fusca vix dentata, lineaque cinerea conspicua utrinque ab humero usque ad medium elytrum ducta. Castaneo-fuscus, capite nigro; thorace (ante spinam tumide dilatato) griseo-nebuloso; elytris basi clare rufo-fuscis, macula transversa oblonga communi post scutellum cinereo-marginata, vitta obliqua utrinque post medium griseo-marginata lineolaque ante apicem, saturatius fuscis, linea oblique utrinque ab humero usque ad medium elytrum, cinerea.

Long. 2 lin.

Hab. Mexico, Cordova, Jalapa (*Höge*).

In all the numerous examples examined of *L. tumidicollis* the dark oblique spot or belt of the elytra is sharply multidentate on its hinder margin, or even broken up into spots, and there are no traces of the anterior oblique pale-grey streak from each shoulder.

33. **Lepturges abstersus.**

L. tumidicolli et *L. literato* affinissimus, differt solum elytris nigro-plagiatis absque lineis tenuibus griseis et fuscis. Castaneus, carneo-griseo tomentosus; thorace fusco-nebuloso; elytris macula transverso-oblonga scutellari, plaga irregulari marginali-basali, vitta utrinque postmediana oblique intus hamata lineolaque ante apicem, nigris; thorace sicut in *L. tumidicolli* lato et brevi lateribusque ante spinam dilatatis; antennis pedibusque rufescentibus, illis articulis apice, tibiis tarsisque apice nigro-fuscis.

Long. $1\frac{2}{3}$ lin.

Hab. British Honduras, Rio Hondo (*Blancaneaux*).

34. **Lepturges nigridorsis.** (Tab. XXIV. fig. 23.)

L. tumidicolli affinis. Testaceo-ochraceus, capite nigro, elytris plaga magna ovata communi majorem partem dorsi tegente, nigra subnitida, marginibus pallidis cinereo-variis versus apicem lineola utrinque fusca; antennis pedibusque fulvo-testaceis, illis articulis omnibus apice brevissime nigris, tibiis apice tarsisque articulis 2°–4^{m}, nigris; thorace brevi et lato, spina a basi distanti, lateribus ante spinam obliquis nec prope spinam dilatatis, basi sinuatis, dorso fusco-maculato prope marginem anticum bituberculato; elytris apice singulatim rotundatis.

Long. $2–2\frac{1}{2}$ lin.

Hab. Guatemala, Cerro Zunil (*Champion*).

35. **Lepturges physoderus.**

L. tumidicolli proxime affinis et similis, sed thorace ante spinam adhuc magis rotundato-dilatato, elytrisque aliter signatis. Castaneo-fuscus, thorace griseo, medio dorso fusco vel fusco-bimaculato; elytris fascia recta basali castaneo-rufa post fasciam guttis et lineolis plurimis (hic illic seriatis) nigro-fuscis et griseis, lateribus versus basin fasciaque indefinita obliqua pone medium, nigro-fuscis; thorace brevi et lateribus medio brevi spatio rotundato-dilatatis, ante spinam breviter sinuatis, spina brevi recte exstanti, post spinam sinuato-angustato; elytris apice breviter oblique truncatis, crebre punctulatis; antennis pedibusque rufo-testaceis, illis articulis apice, tibiis apice et tarsis (art. 1° basi excepto) nigris.

Long. $1\frac{1}{2}–2$ lin.

Hab. Guatemala, Pantaleon (*Champion*); Panama, Volcan de Chiriqui, Bugaba (*Champion*).

The single Guatemalan example has fewer and less distinct grey points and lineoles on the elytra than the specimens from the State of Panama. One of the latter (immature?) is wholly chestnut-red, with obscure minute fuscous and grey spots.

36. **Lepturges xantho.** (Tab. XXIV. fig. 24.)

L. tumidicolli affinis, sed coloribus valde diversus et *L. pallidulo* similis. Parvus, oblongus, fulvo-ochraceus; capite nigro-fusco, thorace cinereo vittis duabus dorsalibus abbreviatis nigro-fuscis, elytris lineolis tribus post medium suturaque plus minusve nigro-fuscis, lituris obliquis subobsoletis cinereis; antennis flavis, articulis omnibus apice anguste nigris; pedibus pallide rufo-testaceis, tibiis apice tarsisque articulis 2°–4ᵐ nigris; thorace lato et brevi trapezoideo, spina laterali abrupte exstanti sat ante basin, lateribus ante spinam brevi spatio dilatatis, post spinam profunde emarginatis; elytris crebre punctulatis, apice singulatim rotundatis vel obtusissime truncatis.

Long. $2\frac{1}{6}$ lin.

Hab. GUATEMALA, Cerro Zunil (*Champion*).

Like *L. tumidicollis* and its numerous allies, much shorter and broader than *L. pallidulus*, and the thorax of a different form, though the lateral spines are placed somewhat remote from the hind margin in all these species. The anterior and middle coxæ approximate very closely, the sterna between them being reduced to mere threads.

37. **Lepturges amplicollis.** (Tab. XXIV. fig. 25.)

Anguste oblongus postice angustatus, fuscus; thorace supra fasciaque elytrorum recta basali pube sericea cinereo-grisea vestitis, elytris guttis nigris lineatim (prope apicem confuse) dispositis interspatiis inter guttas nigras griseo-lineolatis; antennis obscure rufescentibus, articulis a 3° apice fuscis, pedibus fuscis, femoribus basi, tibiis dimidio basali tarsisque basi flavo-testaceis; thorace mox ab angulis anticis rotundato-dilatato, spina laterali retrorsum spectanti prope basin, lateribus ante spinam leviter sinuatis, post spinam sinuato-angustatis; elytris apice oblique sinuato-truncatis angulo suturali acuto exteriori longe producto, epipleuris vix verticalibus; pedibus posticis mediocriter elongatis, femoribus sat longe pedunculatis apice ♂ ♀ gradatim clavatis.

Long. 2–4 lin.

Hab. PANAMA, Volcan de Chiriqui (*Champion*).

Coloured and marked nearly as in *L. physoderus*, and the thorax similar in shape; but the general form of the body is that of *Anisopodus*, to which genus also it approximates in the somewhat lengthened hind legs, so different from the *Lepturges* of the *L. tumidicollis* group, which have short hind legs and shorter and thicker femora. The gradually sloping epipleuræ of the elytra, however, forbid the species being associated with *Anisopodus*.

The silky blond hairs of the thorax and base of the elytra are conspicuous only in well-preserved specimens.

38. **Lepturges (?) rufulus.** (Tab. XXIV. fig. 26.)

Minutus, subglaber, testaceo-rufus; elytris utrinque dimidio apicali nigris, litura arcuata a margine post humerum usque prope suturam lineaque oblique post medium suturam haud attingente, griseo-albo tomentosis, antennis articulis 1°–4ᵐ apice femoribusque apice fusco-nigris; fronte valde convexa, oculis parvis; thorace

transversim quadrato, lateribus usque spinam parvam rectis parallelis, post spinam sinuatis, basi angustato; elytris post basin depressis postice convexis, apice singulatim rotundatis.

Pro- et mesosternum angustissima coxis fere contiguis. Antennæ corpore fere duplo longiores, subtus sparsim breviter ciliatæ; scapo sicut in cæteris *Lepturgis* elongato, articulis 4°–10^{m} subæqualibus. Femora gradatim clavata; tarsi postice articulo 1° cæteris 3 conjunctis æquali.

Long. $1\frac{1}{3}$ lin.

Hab. GUATEMALA, San Gerónimo (*Champion*).

One example only. Agrees with *Lepturges* in its chief structural characters; but the very small eyes, convex posterior part of the elytra, and the peculiar coloration almost justify its separation as a distinct genus. The anterior of the narrow grey-white marks of the elytra is curved towards the base; the posterior is oblique from near the suture rearward.

39. **Lepturges** —— ?

Hab. MEXICO, Jalapa (*Höge*).

One specimen, imperfect and probably discoloured, of a species distinct from all the foregoing.

40. **Lepturges** —— ?

Hab. GUATEMALA, Cerro Zunil (*Champion*).

Also imperfect and discoloured or abraded. One example.

41. **Lepturges mundulus.**

L. callizono affinis et similis. Parvus, anguste oblongo-ovatus, subdepressus, fuscus; thorace indistincte griseo-notato, elytris cano-griseis macula transversa circumscutellari (vix triangulari) fascia lata post medium apud suturam late interrupta, guttulis inter scutellum et fasciam maculaque biloba anteapicali, nigro-fuscis; antennis fulvo-testaceis; thorace spina a basin sat distanti acuta obliqua, ante spinam recte angustato, post spinam profunde sinuato, sed angulis posticis rectis; elytris apice singulatim rotundatis, confertim punctulatis; pedibus rufo-testaceis, tarsis posticis articulo basali sat elongata.

Long. $1\frac{1}{4}$ lin.

Hab. MEXICO, Jalapa (*Höge*).

Extremely near *L. callizonus*, but easily distinguishable by the postmedian fascia being broken into two large spots, widely separated at the suture, and by the absence of the second transverse subapical spot of the elytra.

42. **Lepturges** —— ?

Hab. PANAMA, Volcan de Chiriqui (*Champion*).

One example, too imperfect to be described.

EUCHARITOLUS (to follow the genus *Lepturges*, p. 171).

Corpus oblongum, parum convexum absque setis et tuberculis. Frons lata et brevis; oculi grosse granulati, lobis inferioribus magnis suborbiculatis. Antennæ elongatissimæ et tenuissimæ, sparsissime setosæ, scapo subtus subflexuoso, articulis 3°–10^{m} subæqualibus, 11° (♂ ♀) quam cæteri singuli duplo longiori. Thorax latus, tubere lato laterali post medium apice acuto, post tuber lateribus usque ad basin rectis. Elytra sicut in *Anisopodo*, epipleuris verticalibus, apice oblique et late truncata. Pro- et mesosternum sat lata, plana. Femora gradatim sat crasse clavata; tarsi postici sat graciles, articulo 1° quam 2^{us} et 3^{us} conjuncti dimidio longiori. ♂. Segmentum dorsale apicale apice profunde angulariter emarginatum; ventrale latum angulis spinosis. ♀. Ovipositor longe ultra elytra extensus, segmentum dorsale apice acutissimum, ventrale obtusum.

Most nearly allied perhaps to *Lepturges*, but differing in the width of the pro- and mesosternum.

1. **Eucharitolus pulcher.**

Purpurascente-cinereus, elytris maculis oblongis utrinque octo, viz. 2 basalibus, 3 marginalibus (quarum mediana multo majori) et 3 discoidalibus (quarum 1^{a} minuta angusta post scutellum et prope suturam, 2^{a} obliqua angusta post medium maculam marginalem interdum attingente, 3^{a}que ante apicem), fusco-purpureis; antennis pedibusque obscure rufescentibus.

Long. $2\frac{3}{4}$–$3\frac{1}{4}$ lin.

Hab. PANAMA, Bugaba (*Champion*).

PHRISSOLAUS (p. 172).

Phrissolaus inspersus (p. 172).

To the locality given, add:—PANAMA, Volcan de Chiriqui (*Champion*).

SYMPAGUS (p. 172).

Sympagus lætabilis (p. 173).

To the locality given, add:—PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

DECTES (p. 173).

Dectes spinosus (p. 173).

To the localities given, add:—MEXICO, Saltillo in Coahuila (*Dr. Palmer*).

Dectes texanus (p. 173).

To the localities given, add:—MEXICO, near the city (*Flohr*), Jalapa, Oaxaca (*Höge*).

Dectes mexicanus (p. 174).

To the Mexican localities given, add:—Jalapa, Cerro de Plumas (*Höge*).

The species we have enumerated under the genus *Dectes* form two somewhat distinct groups:—

1. *Dectes* (Leconte, Horn). Elytra densely clothed with erect setæ; scape of the antennæ scarcely flattened beneath. *D. spinosus*, *D. texanus*.
2. *Canidia* (Thomson). Elytra with few and scattered incumbent setæ, or naked; scape of the antennæ broadly flattened or even grooved beneath. *D. mexicanus*, *D. spinicornis*, *D. balteatus*, and *C. cincticornis*, Thoms. (allied to *D. balteatus*).

OXATHRES (p. 174).

This genus must be withdrawn from our fauna, our species *O. pictulus*, on further examination, proving to have a different form of ovipositor in the female from that which is characteristic of *Oxathres*, in which the dorsal plate of this organ tapers to a sharp point, and is in the typical species carinated down the middle. In *O. pictulus*, though the bispinose ventral plate resembles that of *Oxathres*, the dorsal plate is broad and obtuse at the apex. The species must be placed in *Nyssodrys*, near *N. calligramma*.

SPHENOPSILUS.

Gen. *Oxathri* affinis. Corpus scaphiforme absque setis. Caput parvum, angustum; oculi subtiliter granulati, lobo inferiori subtriangulari, elongato. Antennæ corpore vix longiores, tenues, articulis 1°–4^{m} subtus ciliatis, scapo valde elongato, gracili, apice clavato. Thorax graciliter trapezoideus, inermis, post medium vix rotundato-dilatatus. Elytra postice curvatim attenuata, apice sinuato-truncata, angulis externis valde productis. Prosternum et mesosternum angusta, illo valde arcuato hoc alte tuberculato. Pedes validi; femora gradatim incrassata; tarsi articulo 1° quam 2^{us} et 3^{us} conjuncti haud longiori.

♂. Segmentum apicale dorsale apice arcuatim emarginatum, ventrale latius, angulis acute productis.

♀. Segmentum apicale mediocriter elongatum; dorsale late lanceolatum dorso subcarinato apice in denticulum prolongato; ventrale semitubulare apice sinuatum, angulis productis acutis.

The species for which this genus is rendered necessary has little resemblance to any other member of the "Acanthocinini" group. The body is much narrowed anteriorly, including the head, and rather more gradually posteriorly; the antennal scape is long and slender, and clavate at the tip. The apical abdominal segment in both sexes is constructed nearly as in *Oxathres*, but the dorsal plate in the female is shorter and broader.

1. **Sphenopsilus claviger.** (Tab. XXV. fig. 1.)

Fulvescenti- vel ochraceo-fuscus, undique sat confertim atro-fusco irroratus elytrisque post medium fascia angusta valde undulata (suturam haud attingente) atro-fusca; thorace sparsim punctulato; elytris obsolete costulatis; antennis nigris, scapo medio articulisque 3°–6^{m} (apicibus exceptis) rufo-testaceis.

Long. $3\frac{3}{4}$–6 lin.

Hab. PANAMA, Bugaba (*Champion*).

Several examples, captured in the forest region of the "tierra caliente."

PROBATIUS (p. 175).

Probatius mexicanus (p. 175).

To the localities given, add:—MEXICO, Oaxaca, Cerro de Plumas (*Höge*); PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

BARYSSINUS (p. 175).

Baryssinus bilineatus (p. 175).

To the localities given, add:—MEXICO, Jalapa (*Höge*).

ŒDOPEZA (p. 175).

Œdopeza pogonocheroides (p. 176).

To the localities given, add:—MEXICO, Cerro de Plumas (*Höge*); GUATEMALA, Pantaleon, Torola, El Tumbador (*Champion*); PANAMA, Bugaba, Tolé (*Champion*).

Œdopeza incerta (p. 176).

This species, which I placed in *Œdopeza* with doubt, must be removed from the genus. It is better placed in *Leptostylus*, where it forms a member of a small aberrant group closely allied to *Leiopus nœviicornis*, *alpha*, &c., but differing from them in the thorax being destitute of lateral spine.

TRYPANIDIUS (p. 176).

Trypanidius mexicanus (p. 176).

To the localities given, add:—PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

CHÆTANES (p. 177).

Chætanes setiger (p. 177).

To the localities given, add:—PANAMA, Bugaba (*Champion*).

CARPHEOLUS (to follow the genus *Chætanes*, p. 177).

Gen. *Œdopezæ* et *Chætani* proxime affinis, ab ambobus differt thorace inermi elytrisque absque setis erectis. Corpus oblongo-ovatum nec setosum. Caput normale; oculi grosse granulati, lobo inferiori magno, oblongo. Antennæ (♂ ♀) corpore fere dimidio longiores, haud setosæ, articulis 1°–4^{m} irroratis, 1° apice infra producto acuto, 3° et 4° valde elongatis, 5°–11^{m} multo brevioribus, 11° quam præcedens breviori. Thorax inermis, medio obtuso-rotundatus, dorso æquali. Elytra convexa, apice singulatim rotundata, dorso tuberculis guttiformibus parum elevatis nigro-pubescentibus seriatim digestis. Pedes sat validi; femora pedunculata et elongato-clavata; tarsi postici mediocres, articulo 1° quam 2^{us} et 3^{us} conjuncti paullo longiori. Prosternum angustissimum; mesosternum mediocre, postice angustatum.

♂. Segmentum apicale dorsale breve, apice late rotundato; ventrale truncatum vix sinuatum.

♀. Ovipositor longe elongatus; segmentum dorsale angustum acuminatum, ventrale apice breviter emarginatum.

1. **Carpheolus sublineatus.** (Tab. XXV. fig. 2.)

Nigro-fuscus, opacus; capite, scapo, thorace, pedibus corporeque subtus cinereo- et fulvo- minute irroratis, elytris fascia undulata post medium apud suturam plerumque valde dilatata, albo-cinerea, utrinque lineis 5–6 fulvis, guttis elevatis nigro-pubescentibus interruptis; antennis articulis 3° et 4° cinereo-testaceis fusco-irroratis, 5°–11^{m} cinereis apice nigris.

Long. 4–4½ lin.

Hab. PANAMA, Volcan de Chiriqui, Tolé (*Champion*).

ATRYPANIUS (p. 177).

Atrypanius conspersus (p. 178).

To the localities given, add:—MEXICO, Jalapa, Almolonga (*Höge*); GUATEMALA, Panima, Sinanja (*Champion*); PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

Atrypanius sedatus (p. 178).

To the localities given, add:—MEXICO, Almolonga, Jalapa (*Höge*): GUATEMALA, Zapote, Cerro Zunil (*Champion*); PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

A common species in our region.

Atrypanius punctatellus (p. 178).

To the localities given, add:—PANAMA, Bugaba (*Champion*).

Captured in great plenty by Mr. Champion in the "tierra caliente" at Bugaba.

4. **Atrypanius irrorellus.**

Minor, anguste ovatus, convexus, nigro-fuscus; thorace medio vittis duabus (interdum interruptis) guttisque fulvo-aurantiacis, elytris fulvo-irroratis; antennis castaneo-rufis, scapo gradatim leviter incrassato, articulo 5° quam 4^{us} multo minori, cæteribus parum decrescentibus; thorace prope basin spina laterali valida acuta, post spinam oblique angustato; elytris convexis, apice obtusissime oblique truncatis undique discrete punctatis; prosterno quam in *Leiopo nebuloso* latiori; mesosterno multo latiori, postice angustato. Femoribus sat crasse clavatis; tarsis posticis brevibus, articulo 1° quam 2^{us} et 3^{us} conjuncti paullo brevioribus. Oculis lobo inferiori elongato-oblongo infra paullo angustato. Abdomine segmento terminali ♂ brevi obtuso; ♀ in ovipositorem brevem prolongato, apice obtuso.

Long. 3 lin.

Hab. GUATEMALA, Mirandilla (*Champion*); PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

NYSSODRYS (p. 178).

The characters of this genus given in the original description cited, with the addition and correction at pp. 177 and 178, may perhaps suffice to distinguish it from *Leiopus*, *Lepturges*, *Toronœus*, and the numerous allied genera; but the study of many new species since discovered, and a re-examination of those previously described, reveal so great a diversity of forms that I doubt much if the genus can be maintained as hitherto defined. The elongate-ovate, convex species, with short stout legs, thickened posterior femora, short basal joint to the posterior tarsi, and elongate-oblong lower lobe of the eyes, I have already transferred to *Atrypanius*. I now propose to remove certain other species, which have longer hind legs with long peduncles and rather abruptly formed club to the femora, and a longer first tarsal joint, to the genus *Sporetus*, notwithstanding the absence, or at least the extreme paucity, of elytral setæ. *Nyssodrys guttula* and *N. vitticollis* come within this category; and they agree better with *Sporetus* than with

Nyssodrys in style of markings, and in the presence of a few short rigid bristles on the upper as well as the numerous setæ on the underside of the antennæ.

The following is a rearrangement of all the species known to me.

I.

Nyssodrys contempta (p. 179).

To the localities given, add:—MEXICO, Jalapa (*Höge*); BRITISH HONDURAS, R. Sarstoon (*Blancaneaux*); GUATEMALA, Cerro Zunil, Volcan de Atitlan, Las Mercedes, Torola, Mirandilla, Sabo (*Champion*); PANAMA, Volcan de Chiriqui, Bugaba, David (*Champion*).

One of the commonest species of Longicornia in Central America. *N. contempta* belongs to a group differing from the typical *Nyssodrys* (e. g. *N. caudata*) by the much shorter ovipositor in the female, and the shorter and more thickly (though gradually) clavate hind femora, the more convex and ovate form of body, and shorter basal joint of the hind tarsi. The group is allied to *Atrypanius*, of which it has the form of thorax; it contains several species with stouter and shorter-jointed antennæ, and others with very long capilliform antennæ; to it belong, of already described species, *N. binoculata*, *N. lignaria*, *N. cinerascens*, *N. lentiginosa*, *N. corticalis*, *N. grisella*, *N. spreta*, *Lepturges lineatocollis*, and the four following:—

1 (A). **Nyssodrys scutellata.**

Lepturges scutellatus, Bates, Ann. Nat. Hist. ser. 3, xvii. p. 434[1].

Hab. BRITISH HONDURAS, Rio Hondo (*Blancaneaux*); PANAMA, Volcan de Chiriqui (*Champion*).—SOUTH AMERICA, Amazons[1].

Nyssodrys leucopyga (p. 179).

To the locality given, add:—PANAMA, Bugaba (*Champion*).

1 (B). **Nyssodrys infima.**

Parva, anguste oblongo-ovata, convexa, cinerea nigro-fusco sparsa; thorace vitta mediana, elytris vitta suturali a basi usque ad medium ibique in fasciam obliquam utrinque versus discum divergente, nigro-fuscis; oculis lobo inferiori magno, oblongo (infra paullo angustato); antennis quam corpus duplo longioribus, capillariis, fusco-castaneis, sparsim setosis, versus apicem pubescentibus, articulis apice infuscatis a 4° gradatim longioribus; thorace subquadrato, antice perparum angustato, spina brevi, laterali ante basin, post spinam lateribus paullo obliquis rectis, angulo basali obtuso; elytris apice oblique truncatis.

Prosterno fere sicut in *Leiopo nebuloso* angusto; mesosterno quam in hac specie latiori, postice parum angustato. Femoribus posticis gradatim sat crasse clavatis; tarsis articulo basali quam 2^us^ et 3^us^ conjuncti conspicue longioribus.

Long. 2 lin.

Hab. PANAMA, Bugaba (*Champion*).

1 (C). **Nyssodrys exilis.**

Parva, anguste oblongo-ovata, subconvexa, ochraceo-fusca; thorace lituris indistinctis nigro-fuscis, elytris nigro-

fusco et griseo minute nebulosis maculaque cinereo-grisea distinctiori utrinque laterali; oculis lobo inferiori minus elongato, subtriangulari; antennis quam corpus fere duplo longioribus, capillariis, testaceis, sparsim setosis, articulis apice infuscatis, usque ad 11^{m} elongatis; thorace transverso-trapezoideo, spina laterali acuta prope basin, lateribus post spinam valde obliquis et rectis, angulo basali obtusissimo; elytris apice singulatim rotundatis.

Prosterno angustissimo; mesosterno mediocriter lato, postice angustato. Femoribus posticis gradatim sat crasse clavatis; tarsis articulo basali quam 2^{us} et 3^{us} conjuncti paullo longioribus. ♀. Ovipositore paullo ultra elytra conspicuo, segmento dorsali late rotundato.

Long. $1\frac{1}{2}$–$2\frac{1}{4}$ lin.

Hab. Panama, Bugaba (*Champion*).

Differs from the other species of this section of *Nyssodrys* in the less elongated and subtriangular form of the lower lobe of the eyes. The pro- and mesosternum are nearly as in *Leiopus nebulosus*; and I should have placed the species in *Leiopus* had the antennæ not differed so greatly from that genus in their length and tenuity.

II.

Nyssodrys caudata (p. 179).

To the localities given, add:—Panama, Volcan de Chiriqui, Bugaba (*Champion*).

The Central-American form of this species differs constantly in general colour and markings from the Amazonian type, and merits a distinctive name:—

Var. *N. ocellata*. A typo differt colore ochraceo-fusco sicut in *N. deleta*, inter fascias nunquam cinereo; fascia mediana undulata angustiori, fasciaque anteapicali semper multo abbreviata, punctiformi, signaturis omnibus lætius et distinctius cinereo-ochraceo marginatis.

Nyssodrys deleta (p. 179).

To the localities given, add:—Panama, Volcan de Chiriqui, Bugaba (*Champion*).

3 (a). **Nyssodrys porifera.** (Tab. XXV. fig. 3, ♀.)

N. efflictæ quoad colores similis sed major et robustior elytrisque apice late et obtuse truncatis; cinereo-fusca, elytris utrinque ante medium plaga magna albo-cinerea nigro-punctata, et prope apicem litura cinerea multiflexuosa; oculis lobo inferiori magno, oblongo; antennis pedibusque cinereo-fuscis; thorace spina laterali tuberculiformi longe ante basin, ante spinam subrotundato-angustato, post spinam sinuato vix angustato; scutello nigro bimaculato; elytris apice late parum oblique truncatis angulis nullo modo productis, prope basin sat confertim confuse punctulatis, apud plagam cineream et ultra versus apicem punctis lineatim digestis, nigris, nonnullis nigro-marginatis.

Prosterno acetabulo latitudine æquali; mesosterno latissimo.

Long. $4\frac{1}{4}$–$6\frac{1}{2}$ lin. ♂ ♀.

Hab. Panama, Volcan de Chiriqui, Bugaba (*Champion*).

Closely allied to *N. efflicta*, which has in some examples a similar slender subapical grey zigzag marking, but with much finer punctuation, especially on the ashy-white lateral spot.

The three preceding species belong to the typical group of *Nyssodrys*, distinguished

by the long ovipositor of the female, the dorsal segment of which is sharply pointed, and the ventral truncated or sinuated, and by the elongate-oblong, subdepressed form of body, the very gradually thickened hind thighs, and longish basal joint of the hind tarsi. The lower lobe of the eye is large and oblong, and the pro- and mesosternum are of considerable width. To this group belong, besides the foregoing, *Nyssodrys signifera*, *N. propinqua*, *N. simulata*, *N. efflicta*, *N. rodens*, and *N. excelsa*, all from the Amazons, and *N. conspicillaris*, Er., from Peru; to the same group belongs a subgroup of species including *N. incisa*, *N. stillata*, and *N. anceps*, and *N. inclusa* described below. Aberrant species of the group, having much thicker (elongate-clavate) hind thighs and broader and shorter lower eye-lobes, are *N. alboplagiata*, *N. lineolata*, and *N. ramea* from the Amazons.

3 (B). **Nyssodrys inclusa.** (Tab. XXV. fig. 4.)

N. stillatæ (Bates) affinis et similis. Angustissime oblonga, olivaceo-nigra; thorace vittis sex (2ª utrinque abbreviata), elytris plagis e maculis agglomeratis maculisque suturalibus viridi-cinereis; antennis longissimis tenuibus castaneo-rufis, articulis apice fusco-nigris subtus et supra (multo sparsius) setulosis; oculis lobo inferiori oblongo mediocriter elongato; thorace quam in *N. caudata* angustiori, minus trapezoideo, longe ante basin angulatim dilatato (nec spinoso nec tuberculato); elytris apice sinuato-truncatis, angulo suturali acuto, exteriori sat longe producto; pedibus sicut in *N. caudata*; mesosterno late quadrato, postice haud angustato; prosterno multo angustiori.

Long. $3\frac{1}{2}$–4 lin.

Hab. PANAMA, Bugaba (*Champion*).

A member of a subgroup having nearly all the structural characters of the *N. caudata* group, including the long tubular female ovipositor with truncated ventral segment, and the emarginated dorsal and ventral plates of the male apical segment, but differing in colour and markings—olive-black, spotted (the spots variously agglomerated) with light greyish-ashy. The short setæ on the antennæ indicate an affinity with *Sporetus*.

III.

Nyssodrys polyspila (p. 180).

To the localities given, add:—PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

Belongs to a distinct group, characterized by the smaller and shorter lower lobe of the eye (which is somewhat narrowed below), by the thorax being angulated (not spined) some distance from the base, the elytra transversely truncated, with the external angle toothed, the mesosternum broad as in *Leptostylus*, and the prosternum proportionally broad. The female ovipositor in the majority of the species is short and flattened, with the dorsal segment broadly rounded at the apex, but there are others closely allied in other respects in which the same segment is rather pointed.

The species with obtuse ovipositors are closely allied to *Sympagus*, and might very well be removed to that genus, notwithstanding their more elongate and flattened form

of body. *Lepturges dulcissimus*, *Nyssodrys bispecularis*, *N. pulverea*, and *N. lætifica* belong to the group, and also the following species:—

6 (A). **Nyssodrys vigintiguttata.** (Tab. XXV. fig. 5.)

N. polyspilæ proxime affinis. Anguste oblongus, depressus; capite thoraceque albo-cinereis, hoc medio vittis duabus rectis nigris; elytris castaneis, griseo tenuissime pubescentibus, utrinque maculis circiter 10 (quarum 3 marginalibus majoribus) late separatis subrotundatis, apice lineolisque suturalibus albo-cinereis; antennis quam corpus duplo longioribus, nigris, subtus sparsim ciliatis, articulis 3°–10^{m} subæqualibus, 11° longissimo; elytris basi discrete punctatis, stria suturali a medio usque ad apicem, apice recte truncatis, angulo exteriori dentiformi; pedibus nigris, femoribus (gradatim leviter incrassatis) tibiisque griseo-pubescentibus.

Long. 3 lin. ♂.

Hab. PANAMA, Volcan de Chiriqui (*Champion*).

One example only. The head in front, as in *N. polyspila*, is obliquely retracted, the lower lobe of the eye rather short and narrowed below. In *N.* (*Leiopus*) *polyspila*, as White states, the thorax has numerous whitish spots, and each elytron from eighteen to twenty spots.

6 (B). **Nyssodrys univittis.** (Tab. XXV. fig. 6.)

N. polyspila major, paullo convexior; capite thoraceque albo-cinereis, hoc medio vitta lata nigra; elytris castaneo-fuscis griseo-sericeis, albo-cinereo irregulariter maculatis, humeros et apicem versus maculis in plagas majores agglomeratis, spatio cruciformi circumscutellari fusco; capite antice minus retracto; antennis quam corpus duplo longioribus, articulis 3°–10^{m} subæqualibus, 11° longissimo, subtus sparsim setosis, scapo gradatim leviter clavato; elytris apice subtransversim truncatis, angulo exteriori dentiformi, stria suturali a medio ad apicem; tibiis et tarsis nigris, illis medio late albo-annulatis; pro- et mesosterno latissimis.

Long. 3–4 lin. ♂.

Hab. PANAMA, Volcan de Chiriqui (*Champion*).

8 (A). **Nyssodrys polytænia.** (Tab. XXV. fig. 7.)

N. lætificæ affinis et similis, forma eadem, fulvo-cinerea; thorace vittis quatuor, elytris utrinque vitta suturali (fere usque ad apicem extensa) et marginali (interdum interruptis), vittisque duabus latioribus discoidalibus (1^{a} a basi fere usque ad medium, 2^{a} paullo posteriori), nigris; antennis pedibusque fuscis, femoribus basi flavo-testaceis.

Long. $2\frac{1}{2}$–$3\frac{1}{4}$ lin.

Hab. PANAMA, Bugaba (*Champion*). Numerous examples.

In *N. lætifica* the blackish sutural and discoidal stripes of the elytra end abruptly long before the apex, and are succeeded by a broadish straight fascia of the ashy-grey ground-colour, the margin and apex being spotless, or faintly clouded with fuscous. In *N. polytænia* the sutural vitta (of irregular width) continues very nearly to the apex, and there is no grey fascia, the submarginal vitta reaching nearly to the suture, posterior to the end of the sutural vitta. The thorax, as in *N. lætifica*, is slightly dilated and angulated some distance from the base. Both species have slenderer hind femora than *N. polyspila* and other species of the group; but in the very short and flattened female ovipositor, with rounded dorsal segment, they agree with those species.

11 (A). **Nyssodrys decemguttata.**

Nyssodrys calligramma, p. 181, var. t. 12. f. 17.

Hab. NICARAGUA, Chontales (*Belt*); PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

The anterior lateral spot of the elytra is always small, rounded, and distant from the margin, and the two submedian spots are separate or nearly so, never blended into a broad fascia as in *N. calligramma*. It is generally more elongate in form.

11 (B). **Nyssodrys sulphurescens.**

N. calligrammæ quoad formam simillima, sed pedibus posticis ♂ longioribus femoribusque elongatis gradatim mediocriter incrassatis. Magis depressa, cinerascenti-sulphurea; scutello elytrisque maculis 3 marginalibus, 1ª oblique oblonga, 2ª undulata versus suturam valde angustata, 3ª parva triangulari ante apicem, purpureo-nigris; antennis pedibusque fusco-nigris, illis articulis 1° 2°que toto 3° 4°que dimidio basali rufescentibus; coxis et femoribus tibiisque basi pallide testaceis.

Long. 3–4 lin.

Hab. PANAMA, Bugaba (*Champion*).

11 (C). **Nyssodrys pictula.**

Oxathres pictulus, p. 175.

To the Guatemalan localities given, add:—Rio Maria Linda, Cerro Zunil, Mirandilla, Pantaleon, Volcan de Atitlan, San Isidro (*Champion*).

Generally distributed along the forest-region of the Guatemalan Pacific slope (*Champion*).

In *N. pictula* the apical ventral segment is bispinose as in *Oxathres*, but the female ovipositor is not elongated and narrowed, with pointed and carinated dorsal plate, as in that genus. The species, in fact, approaches in structure very nearly *N. calligramma*, having nearly the same form of thorax (angulated behind the middle), very broad mesosternum, and short lower lobe of the eyes; the apparently bispinose apical ventral segment results from the much deeper sinuate-truncature of the segment; the ovipositor is not much longer than the male apical segment, but is narrower, and the dorsal plate is obtusely rounded at the apex. The hind femora are rather more robustly clavate than in *N. calligramma* *.

* A very similarly-coloured species of this group, with short lower lobe of the eyes, and interesting from the fact of the apical ventral segment having no trace of spiniform lateral angles in either sex, is the following:—

Nyssodrys buckleyi, n. sp.

Magis convexa, purpurascenti-cinerea; elytris utrinque macula obliqua post scutellum fasciaque postmediana apud marginem latissima, nigro-purpureis velutinis; thorace longe post medium angulato et subdentato; elytris apice transversim truncatis, angulo exteriori mediocriter producto; mesosterno latissimo; femoribus pedunculato-clavatis, tibiis tarsisque apice nigris; pectore rufo, abdomine nigro; antennis scapo apice leviter clavato.

Long. $3\frac{3}{4}$ lin.

Hab. BOLIVIA, Prov. Yungas. Collected by the late Mr. C. Buckley.

Nyssodrys longula (181).

A long and slender species, certainly closely allied to *N. calligramma*, though differing in colours and in the slenderer hind femora.

Nyssodrys roseicollis (p. 181).

To the localities given, add:—PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

Differs from the other species of the *N. polyspila* group in the dorsal segment of the abdomen in the female being slightly pointed or ogival at the apex.

Nyssodrys polygramma (p. 181).

This and the following species have, like *N. roseicollis*, a pointed apical dorsal segment in the female, and elongated ovipositor.

14 (A). **Nyssodrys concinna.** (Tab. XXV. fig. 8.)

Anguste oblonga, sublinearis, supra purpureo-nigra; oculorum margine, thorace vitta utrinque laterali, elytris utrinque maculis tribus sublateralibus (1ª elongata subhumerali, interdum cum 2ª rotunda mediana conjuncta, 3ªque ovata prope apicem) flavis; corpore subtus nigro, griseo-pubescenti; thorace lateribus prope basin angulatis subtuberculatis, post angulum usque ad basin oblique angustato, antice mediocriter angustato; elytris elongatis, ♂ parallelis angustis, apice late transversim sinuato-truncatis, angulo exteriori dentiformi; femoribus posticis gradatim clavatis.

Long. 3 lin.

Hab. PANAMA, Bugaba (*Champion*).

IV.

Nyssodrys venusta (p. 180).

Belongs to a small group extremely similar in form and colours and markings to *N. lætifica* and *N. polytænia* of the preceding group, but differing in the thorax having a distinct spine near to the hind margin. The pro- and mesosternum are distinctly narrower (not much broader respectively than in *Leiopus nebulosus*), and the female ovipositor has the dorsal segment bluntly pointed, or ogival at the apex. The following is the only other member of the group known at present:—

Nyssodrys circumscripta (180).

To the localities given, add:—PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

HYLETTUS (p. 182).

Hylettus cœnobita (p. 182).

To the localities given, add:—PANAMA, Bugaba (*Champion*).

TORONÆUS (to follow the genus *Hylettus*, p. 182).

Toronæus, Bates, Ann. & Mag. Nat. Hist. ser. 3, xiv. p. 14.

A genus hitherto known only from Tropical South America, whence six species have been recorded.

1. **Toronæus (?) ——?**

Hab. PANAMA, Bugaba (*Champion*).

A single male example, which I hesitate to describe, the characters of the genus depending on the structure of the female ovipositor.

ASTYNOMUS (p. 182).

Astynomus mucoreus (p. 182).

To the localities given, add:—GUATEMALA, El Reposo, San Isidro, Pantaleon (*Champion*); PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

A common species in the forests of the "tierra caliente" throughout our region.

Astynomus vexillaris (p. 183).

To the localities given, add:—GUATEMALA (*Mus. Stuttgart*); PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

Astynomus picticauda (p. 183).

To the localities given, add:—GUATEMALA, Volcan de Atitlan, Panajachel (*Champion*); PANAMA, Volcan de Chiriqui (*Champion*).

8. **Astynomus eucharis.** (Tab. XXV. fig. 9, ♂.)

Parvus, gracillimus, purpureo-niger; capite linea continua mediana vittaque lata sub oculum, thorace vitta interrupta laterali, guttulisque disci, elytris maculis irregulariter dispositis hic illic confluentibus (quarum una apicali duabusque subapicalibus distinctioribus), cretaceo-albis; thorace post medium tuberculo conico lato parum elevato, lateribus post tuberculum abrupte sinuatis; elytris erecte setosis, versus basin irregulariter punctatis, apice oblique truncatis; antennis fere sicut in *Urographi* robustis, pauciter et breviter setosis, articulo 11° quam precedens breviori, nigris, 3°–7^{m} basi pallidis; pedibus gracilibus, nigris, femoribus, tibiis annulo, tarsis articulo 1°, griseo-albis; femoribus posticis longe pedunculatis, mediocriter clavatis; tarsis posticis articulo 1° quam ceteri conjuncti dimidio longiori; corpore subtus cretaceo-tomentoso.

♂. Segmento apicali elongato, dorsali apice bispinoso.

Long. 4 lin. ♂.

Hab. PANAMA, Volcan de Chiriqui (*Champion*). One example only.

A very distinct species of this genus. The form of the apical dorsal segment of the abdomen in the male is essentially the same as that of the other species, though exaggerated in its length, posterior attenuation, and in the elongation of its angles.

CARPHINA (p. 185).

Carphina arcifera (p. 185).

To the localities given, add:—PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

CARTERICA (p. 186).

Carterica optata (p. 186).

To the localities given, add;—PANAMA, Bugaba, Tolé (*Champion*).

Add also:—

Var. Elytris, sutura antice nigra excepta, flavis.

Hab. Bugaba.

Carterica pygmæa (p. 186).

To the locality given, add:—PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

Add also:—

Var. Elytris, sutura antice nigra excepta, flavis.

Hab. Volcan de Chiriqui.

The species varies in size from $2\frac{1}{3}$ to 4 lines, and there are gradations between the typical examples and the variety in the extension towards the apex of the long and broad yellow humeral vitta.

PRISCILLA (p. 187).

Priscilla hypsiomoides (p. 187).

To the localities given, add:—PANAMA, Bugaba (*Champion*).

COLOBOTHEA (p. 187).

Colobothea ramosa (p. 187).

To the locality given, add:—MEXICO, Almolonga (*Höge*), Juquila (*Sallé*), Tehuantepec (*Sumichrast*).

One example from Almolonga is smaller ($4\frac{1}{2}$ lin.) than Chontales specimens, and one each from Juquila and Tehuantepec much longer (7–$7\frac{1}{2}$ lin.). The Tehuantepec insect does not differ from the typical form in markings, but the specimen from Juquila (a female) has a peculiar appearance, owing to the more compact and less spotted ashy tomentum of the elytra, and to the black dorsal vitta of the thorax being entire, or not divided into two spots, the side of the thorax having also an additional ashy vitta.

Colobothea guatemalena (p. 188).

To the localities given, add:—BRITISH HONDURAS, Belize (*Blancaneaux*); GUATEMALA, Volcan de Atitlan, Cerro Zunil (*Champion*).

Colobothea chontalensis (p. 188).

To the locality given, add :—PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

7 (A). **Colobothea aleata.** (Tab. XXV. fig. 10.)

C. hebraicæ proxime affinis, sed minor et gracilior; elytris guttis multo numerosioribus albis subtessellatis haud in fasciis tribus congestis; thorace medio lineolis tribus, 1° anteriori, 2° et 3° posterioribus, his quam in *C. hebraica* magis approximatis.

Segmento abdominali apicali, ♂ ♀, simplici, sicut in *C. hebraica*.

Long. $4\frac{1}{2}$–6 lin.

Hab. NICARAGUA, Chontales (*Belt*); PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

Colobothea distincta (p. 189).

To the localities given, add :—GUATEMALA, Mirandilla (*Champion*); PANAMA, Bugaba (*Champion*).

13. **Colobothea —— ?**

Hab. PANAMA (*Boucard*).

A single example in very dilapitated condition of what appears to be a very distinct species.

14. **Colobothea —— ?**

Hab. PANAMA, Chiriqui (*Trötsch*).

A single worn specimen, distinct from any of the Central-American species recorded here, and apparently allied to *C. latevittata*, Bates.

CARNEADES (p. 190).

Carneades hemileuca (p. 190).

To the locality given, add :—PANAMA, Bugaba (*Champion*).

6. **Carneades championi.** (Tab. XXV. fig. 11.)

C. superbæ et *C. grandi* proxime affinis et similis, differt thorace nebula discoidali transversa nigro-fusca (lateribus haud maculatis) elytrisque macula communi suturali paullo post scutellum, alteris utrinque ante medium quatuor, fascia recta post medium maculaque transversa quadrata ante apicem, nigris. Cretaceo-alba, interdum ochraceo-fulva; antennis nigris, articulis basi griseo-albis; pedibus ventreque sicut in *C. superba* variegatis.

Long. 6–13 lin. ♂ ♀.

Hab. PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

Differs from *C. superba* and *C. grandis* only in the number and position of the black markings; but in these differences the large series of individuals exhibit unwavering constancy. Besides the absence of distinct black spots from the thorax, the chief

difference lies in the second pair of round black spots of the elytra being always widely distant from each other, and in the presence of a smaller spot on the suture, between the first and second pair; so that, viewed from above, the basal half of the elytra is seen to bear five black spots in a regular position, thus ⁘.

Captured in abundance by Mr. Champion on fallen timber in recently burned forest-clearings.

TAPEINA (p. 191).

Tapeina transversifrons (p. 192).

To the localities given, add:—PANAMA, Volcan de Chiriqui, Bugaba (*Champion*), Matachin (*Schunke*).

2. Tapeina (?) nudicornis.

T. transversifronti ♀ similis, sed differt:—corpore minus depresso; antennis setis parvis sparsissimis absque pilis elongatis, scapo breviori, clavato; thorace tuberculo laterali mediano acuto, dorso sat dense subtiliter punctulato; elytris sparsim setifero-punctulatis, marginibus late incumbenti-fusco-pubescentibus, setis omnibus brevibus; pro- et mesosterno multo angustioribus; pedibus validioribus breviter sparsim pubescentibus, tarsis latioribus.

Long. $2\frac{1}{2}$–4 lin. ♀?

Hab. MEXICO, Oaxaca, Cerro de Plumas (*Höge*).

Three examples, offering no dilatation of the head, and therefore presumably females. Although deceptively similar to *Tapeina transversifrons*, ♀, it is doubtful, considering the shorter and thicker clavate scape and narrower sterna, whether it can be retained in the same genus. The widely-gaping outer rims of the anterior and middle acetabula, and the position and form of the conspicuous notch of the middle tibiæ, do not differ.

BACTRIOLA (to precede the genus *Eumathes*, p. 192).

Gen. *Sæpiseuthi* (Thoms.) proxime affinis. Corpus lineare, tomentosum. Caput inter antennas concavum, fronte breviter quadrata, parum convexa, infra haud retracta. Oculi reniformes, lobo inferiori rotundo, valde convexo. Antennæ corpore paullo longiores, supra versus apices pilosæ, infra usque ad apices longe et regulariter ciliatæ; scapo mediocri, gradatim paullo incrassato; articulo 3° quam 4^{us} breviori, 5°–11^{m} decrescentibus. Thorax anguste cylindricus. Elytra supra deplanata, apice rotundata æqualia, epipleuris verticalibus. Pro- et mesosternum æqualiter angusta, plana. Acetabula antica extus triangulariter aperta, intermedia paullo aperta. Pedes breves; tibiæ intermediæ extus medio profunde sinuatæ; ungues basi late dentatæ, vel "appendiculatæ."

Allied to the Chilian genus *Hebestola*, from which it differs *inter alia* in the unarmed thorax, and the middle acetabula distinctly open externally.

1. Bactriola vittulata. (Tab. XXV. fig. 12.)

Fusca, obscure cinereo-tomentosa; thorace vittis quatuor, elytris vitta suturali, altera angusta laterali epipleurisque anticis, fusco-nigris; antennis articulo 4° basi griseo; thorace elytrisque confertim passim punctulatis.

Long. $2\frac{3}{4}$ lin.

Hab. PANAMA, Volcan de Chiriqui (*Champion*).—SOUTH AMERICA, Brazil (*coll. Bates*).

A single example from Chiriqui, with which a specimen received as from "Brazil" agrees in every respect, except that the ashy-grey adpressed pubescence is not so clearly defined and the general colour more castaneous, owing doubtless to immaturity.

2. **Bactriola paupercula.**

Fusca (elytris subænescentibus), cinereo-fusco tenuiter pubescens, thorace utrinque roseo; antennis nigris, articulis 3°–5ᵐ basi cinereis; pedibus rufo-testaceis, femoribus basi, tibiis apice tarsisque, nigro-fuscis.
Long. $2\frac{1}{4}$ lin.

Hab. PANAMA, Volcan de Chiriqui (*Champion*).
Several examples.

DRYCOTHEA (p. 193).

Drycothea sallæi (p. 193).

To the localities given, add: — BRITISH HONDURAS (*Blancaneaux*); GUATEMALA, Cahabon, Las Mercedes, El Reposo, El Tumbador (*Champion*).

This species differs from *D. stictica*, which it very much resembles in colour, by its shorter form and relatively larger, especially broader, thorax. More definite points of difference are the small lower lobe of the eyes, narrowed below, and the slightly convex mesosternum in *D. sallæi*; the lower lobe of the eyes being very large and broad, as broad or broader below than above, and rounded on the inner side, and the mesosternum gibbous, in *D. stictica*.

Drycothea stictica (p. 193).

To the localities given, add:—MEXICO, Jalapa (*Höge*); BRITISH HONDURAS (*Blancaneaux*); PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

Var. *D. lepidiota*. Oculi lobo inferiori paullo minus rotundato; mesosterno mediocriter convexo.

Hab. MEXICO, Toxpam (*Sallé*).
Labelled *Estola lepidiota*, Chevr. (MS.), in the Sallé collection.
Same habits as *Estola* (*Champion*).

Drycothea cribrata (p. 194).

To the locality given, add:—MEXICO, Jalapa (*Höge*).

5. **Drycothea spreta.**

D. stictícæ valde affinis et similis; minor et angustior, densius fulvo vel fusco-cinereo incumbenti-pubescens et magis confertim et subtilius (apud elytra confusius) punctata. Elongato-oblongo-linearis; oculis lobo inferiori magno, oblongo, sed minus rotundato; thoracis spina parva, acuta; elytris haud perspicue striato-punctatis, confuse, hic illic subseriatim, punctulatis, interstitiis haud convexis; mesosterno supra plano, antice rotundato-declivi.
Long. 4 lin.

Hab. MEXICO, Cordova (*Sallé*, *Höge*), Jalapa (*Höge*).

This species seems to be the common form in Mexico, and to be connected

with *D. stictica*, which is also found in that country, by the intermediate variety, *D. lepidiota*.

6. **Drycothea parva.**

Minor, cinereo-fusco-incumbenti-pubescens et setosa, scutello ochraceo; antennis fuscis, articulis 4°–11ᵐ basi cinereis; oculis lobo inferiori magno subquadrato; thorace grosse discrete punctato, spina laterali parva, acuta; elytris undique confuse punctatis; mesosterno angusto, concavo.

Long. $2\frac{1}{4}$–3 lin.

Hab. PANAMA, Bugaba (*Champion*).

Many examples.

7. **Drycothea curtula.**

Curta, oblongo-subovata sat convexa, fulvo-ochraceo tomentosa, scutello concolori; antennis articulis 6°, 8°, et 10° dimidio basali testaceis; oculis lobo inferiori sat magno subquadrato, infra paullulum angustato; thorace sparsim grosse punctato, spina laterali basi lata, acuta; elytris ochraceo-setosis, sparsim confuse punctatis, punctis majoribus et profundioribus nigro-fuscis intermixtis; corpore subtus pedibusque plumbeo-griseis; mesosterno plano, postice angustato, antice declivi.

Long. 3 lin.

Hab. PANAMA, Bugaba (*Champion*).

The punctuation of the elytra much resembles that of *Estola perforata*.

ASEMOLEA (p. 194).

Asemolea crassicornis (p. 194).

To the locality given, add:—BRITISH HONDURAS (*Blancaneaux*).

3. **Asemolea purpuricollis.** (Tab. XXV. fig. 13.)

Subcylindrica, subtus nigra griseo-pubescens, capite aureo- thorace læte purpureo-roseo sericeo-pubescentibus, elytris nigris ochraceo-fusco pubescentibus et setosis, pedibus nigris, femoribus testaceo-albis; thorace relative parvo, medio paullulum angulato-dilatato; elytris striato-punctatis, apice singulatim rotundatis; antennis brevibus, robustis, articulo 3° quam cæteri vix longiori.

Long. 2–$2\frac{1}{4}$ lin.

Hab. PANAMA, Bugaba (*Champion*).

4. **Asemolea minuta.**

Callia minuta (p. 195).

This insect must be transferred from the genus *Callia* to *Asemolea*. It is closely allied to the preceding species, on account of the unarmed thorax and thickened antennæ.

CALLIA (p. 194).

This genus comprises two groups, characterized as follows:—

CALLIA proper.—Vertex inter antennas latior, vix concavus; tibiæ intermediæ extus haud perspicue emarginatæ.

Includes *C. axillaris*, Germ., *C. azurea*, Serv., *C. fulvocincta*, Bates, *C. xanthomera*,

Redt., *C. chrysomelina*, Pascoe, *C. criocerina*, Bates, *C. albicornis*, n. sp., *C. lycoides*, Bates, and *C. ambigua*, n. sp.

MIMOLAIA.—Vertex inter antennas angustus, concavus (vel tubera antennifera alte elevata); tibiæ intermediæ extus medio perspicue emarginatæ.

Includes *C. halticoides*, Bates, *C. buckleyi*, n. sp.*, and *C. calopterona*, n. sp.

All the species of the section "Mimolaia" present mimetic resemblances to the Lycidæ and other families; this, however, is not an exclusive feature of the section, two species of *Callia* proper, viz. *C. lycoides* and *C. ambigua*, having a very similar livery.

Of other species referred by authors to *Callia*, the following must be removed to other genera:—*C. lampyroides*, Bates, to the allied genus *Zenicomus*, Thomson; *C. minuta* (*ante*, p. 195) to *Asemolea*; and *C. auricollis*, Redt., to *Hastatis*.

3. **Callia albicornis.** (Tab. XXV. fig. 14.)

C. criocerinæ proxime affinis. Anguste oblonga, setosa, vix nitida; capite thoraceque testaceo-flavis; antennis nigris, articulis 7°–11ᵐ testaceo-albis; elytris cyaneis; thorace impunctato, tuberculo lato obtuso laterali; elytris striato-punctatis; pedibus toto nigris, sternis abdomineque plumbeo-nigris.

Long. $2\frac{1}{4}$–$3\frac{1}{2}$ lin.

Hab. PANAMA, Bugaba (*Champion*).

Many examples.

4. **Callia ambigua.**

Anguste oblonga, postice perparum dilatata, erecte setosa, nigra, cinereo-pubescens; vertice thoraceque vitta lata laterali aureo-tomentosis; elytris vel toto nigris, vel vitta curta humerali (postice attenuata) fulva, vel dimidio anteriori (sutura epipleurisque exceptis) fulvis; antennis articulis 3°–11ᵐ basi anguste griseis; thorace breviter cylindrico, lateribus pone medium angulatis vix tuberculatis; elytris striato-punctatis, prope suturam per totam longitudinem depressis.

Long. $2\frac{2}{3}$–$3\frac{1}{3}$ lin.

Hab. MEXICO (*Deyrolle, coll. Bates*), Jalapa (*Höge*).

This species would fit almost equally well the genus *Asemolea*.

5. **Callia calopterona.**

Gen. *Calopteroni* (fam. Lycidæ) similis. Elongata, angusta, postice paullo dilatata; subtus nigra, supra breviter setosa, fulvo-coccinea vel fulvo-ochracea; genis posticis, vitta dorsali thoracis, elytris sutura, epipleuris

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* **Callia (Mimolaia) buckleyi.**

Angusta, sublinearis, postice paullo dilatata, subtus nigra, supra ochraceo-fulva; thorace vitta lata dorsali, elytrisque plaga communi anteriori, triente apicali, sutura, et epipleuris antice, nigris; capite angusto, fulvo-ochraceo, vitta utrinque laterali post oculum alteraque occipitali, nigris, tuberibus antenniferis valde elevatis, subapproximatis; thorace angusto, cylindrico, tuberculo parvo, acuto, laterali; elytris undique sat confertim, hic illic lineatim, punctulatis; pedibus nigris, femoribus basi testaceis, tibiis intermediis extus medio emarginatis; antennis robustis, subtus longe ciliatis, nigris, articulo 3° toto 4°que basi pallide testaceis.

Long. $3\frac{1}{4}$ lin.

Hab. BOLIVIA, Prov. Yungas (*Buckley*).

dimidioque posteriori, nigris; antennis robustis, versus apicem acuminatis, subtus ciliatis, nigris, articulis 2°–6ᵐ basi breviter testaceis; pedibus nigris, femoribus 4 anterioribus basi plus minusve testaceis; capite angusto, inter antennas valde concavo (vel tuberibus antenniferis valde elevatis); thorace cylindrico, tuberculo laterali conspicuo, acuto; elytris apice obtuse rotundatis, punctulatis, dorso obtuse costatis.

Var. Elytris, sutura angusta nigra excepta, toto fulvo-coccineis vel fulvo-ochraceis.

Long. $3\frac{1}{4}$–$4\frac{1}{4}$ lin.

Hab. Panama, Volcan de Chiriqui, Bugaba (*Champion*).

Both forms occur in the same localities.

6. **Callia (?) ——.**

Hab. Mexico (*Sallé*).

An example of a remarkably elongated species referable to this or a closely allied genus; it is unfortunately in a bad state of preservation.

PHÆA (p. 195).

2 (a). **Phæa rosea.**

P. scuticolli proxime affinis. Cylindrica, elytris depressis, corpore subtus capiteque pallide fulvo-testaceis, thorace et elytris læte roseis; antennis nigris, articulis basi (2° toto) rufis, scapo versus apicem scabroso-punctato; capite dense pubescenti, opaco; thorace antice et postice sulcato-constricto, umbone sicut in *P. scuticolli* valde elevato utrinque sulculo profundo marginato; elytris lineatim, versus apicem confuse et subtilius, punctatis; pedibus testaceo-rufis, tibiis (basi excepta) tarsisque nigris.

Long. $4\frac{1}{2}$ lin.

Hab. Panama, Bugaba (*Champion*).

The elytra in this species are relatively much longer than in the similarly-coloured *P. coccinea* and *P. lineola*. From the other red species, *P. miniata* and *P. rubella*, it differs *inter alia* in the colour of the antennæ and legs.

Phæa phthisica (p. 197).

Var. Antennis toto nigris; macula nigra frontali medio divisa.

Hab. Mexico, Almolonga (*Höge*).

Phæa phthisica is distinguished from *P. macilenta* and from *P. tenuata* by the upper part of the forehead being black and the vertex clothed with golden pubescence, both of which characters I omitted in describing the species. The variety above mentioned, of which I have only seen a single specimen, differs from all the numerous examples seen of *P. phthisica* by the black frontal patch being reduced in size and divided into two spots.

10 (a). **Phæa auricapilla.**

P. phthisicæ affinis et simillima; differt solum thorace absque sulcis discoidalibus. Linearis nigra; capite flavo, fronte supra genisque post oculos, nigris, vertice densius aureo-pubescenti, fronte valde convexa; thorace

cylindrico, margine antico rufo-testaceo, grosse punctato, umbone nullo, sulcis delimitantibus obsoletis sed ibique linea leviter depressa; antennis articulis 4°–11^{m} basi testaceis.

Long. 2–3 lin.

Hab. PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

In *P. phthisica* the thoracic umbo though obsolete is indicated by its marginal sulci being always present and sharply incised. In *P. auricapilla* there are vague linear depressions only in place of the sulci.

TETRAOPES (p. 200).

Tetraopes thoreyi (p. 201).

To the Mexican locality given, add:—near the city, Esperanza, Vera Cruz (*Höge*).

Tetraopes subfasciatus (p. 201).

To the Mexican localities given, add:—Milpas (*Forrer*).

9. **Tetraopes —— ?**

Hab. MEXICO, Northern Sonora (*Morrison*).

One example of what is probably a variety of the North-American *T. femoratus*, Lec., differing from the var. *oregonensis* only in the tibiæ as well as the femora of all the legs being red.

TETROPS (to follow the genus *Tetraopes*, p. 200).

Tetrops, Stephens, Man. Brit. Col. p. 269; Lacordaire, Gen. Col. ix. p. 880.

A genus characteristic of North Temperate faunas both of the Eastern and the Western Hemispheres. Nine species have been described. The following agrees with the European *T. præusta* in all essential structural characters, but differs in its shorter and thicker antennæ.

1. **Tetrops validicornis.**

Cylindrica, supra paullulum deplanata, griseo-lanuginosa, nigra; elytris castaneo-fuscis; antennis griseo-annulatis, articulis 5°–11^{m} brevibus, subovatis; capite thoraceque sat grosse punctatis, fronte inter antennas lata, planata; thorace post medium paullo dilatato, basi transversim mediocriter depresso, angustato; elytris undique confertim sublineatim punctatis, apice singulatim late rotundatis.

Long. $3\frac{1}{4}$–$3\frac{1}{2}$ lin.

Hab. MEXICO, Oaxaca (*Höge*).

MECAS (p. 203).

Mecas ambigenus (p. 203).

To the locality Mexico add:—Ciudad in Durango, Milpas (*Forrer*).

Mecas laminata (p. 204).

To the localities given, add:—Mexico, Maltrata, Cordova (*Höge*).

10. **Mecas (?) —— ?**

Hab. Mexico (*Sallé*).

One example of a distinct species, in bad condition, doubtfully belonging to this genus.

PANNYCHIS (p. 205).

4. **Pannychis atripennis.**

A cæteris speciebus differt elytris toto nigris. Niger, subnitidus, capite thoraceque supra et subtus fulvo-rufis, genis post oculos, vitta verticis thoraceque vittis tribus nigris, prosterno postice nigro; thorace cylindrico nec lateribus rotundatis; elytris undique sat confertim punctatis, apice juxta suturam oblique truncatis. Long. 5 lin.

Hab. Mexico, Mina de Zimapan (*Baden, coll. Bates*).

A very distinct species. The elytra are without trace of costæ, and conspicuously depressed for a broad space along the suture.

ÆRENICA (p. 206).

Ærenica hirsuta (p. 206).

To the locality given, add:—Panama, Bugaba (*Champion*).

ANTODICE (p. 207).

Antodice nympha (p. 207).

To the localities given, add:—Mexico, Jalapa (*Höge*); Costa Rica, Volcan de Irazu (*Rogers*).

ÆRENICOPSIS (to follow the genus *Antodice*, p. 207).

Gen. *Ærenicæ* affinis et similis, sed differt oculis divisis, etc. Corpus elongatissimum, lineare. Caput parvum, sphæricum, antennis basi approximatis. Oculi divisi; lobis superioribus subsemicircularibus, medio vertici sitis, parum distantibus; lobis inferioribus maximis, intus (apud frontem) approximatis, extus late extensis. Antennæ filiformes, sparsim pilosæ; scapo elongato, cylindrico; articulo 11° quam præcedens breviori. Thorax cylindricus. Elytra linearia apice singulatim in spinam producta. Pedes breves, tenues, tibiis intermediis extus medio emarginatis. Sterna et ungues sicut in *Ærenica*.

The extraordinary Longicorn on which this genus is founded was taken by Mr. Champion only in a single example. Judging from the antennæ being scarcely so long as the body, it appears to be a female. The two parts into which the eyes are divided are quite different in position, relative size, and form from those exhibited in *Tetraopes* and the rest of the numerous group of "Astatheini," so that the genus cannot be well included in that group.

1. Ærenicopsis championi. (Tab. XXV. fig. 15.)

Flavo-cinereo dense tenuiter tomentosa, vertice macula post oculos, thorace vittis dorsalibus latis duabus (singulis fere in duabus divisis), elytris utrinque vittis abbreviatis valde obliquis duabus (1ª ab humero usque mediam suturam, 2ª a medio margine versus suturam prope apicem) vittulisque basali prope scutellum et apicali angustissima, obscure fuscis; antennis nigris; pedibus rufo-testaceis.

Long. $7\frac{1}{2}$ lin.

Hab. PANAMA, Volcan de Chiriqui 3000 feet (*Champion*).

AMILLARUS (p. 207).

Amillarus apicalis (p. 207).

To the localities given, add:—PANAMA, Bugaba (*Champion*).

ERANA (p. 208).

Erana dispar (p. 209).

To the localities given, add:—PANAMA, Bugaba (*Champion*).

Erana fulveola (p. 210).

To the locality given, add:—PANAMA, Bugaba (*Champion*).

9. Erana fuliginella.

Nigra, supra fusco-pubescens, subtus medio grisea; caput robustum fere sicut in gen. *Cephalodina* sed minus; thorace lato, punctato, post medium paullulum dilatato, basi depresso, cum capite linea tenui dorsali cinerea; elytris deplanatis, erecte setosis, confertim (hic illic confluenter) punctulatis, sutura grisescenti; antennis sicut in *Eranis* scapo elongato, articulis supra dense suberecte pubescentibus, infra ciliatis, obscure fulvis, 1° 2°que, 10° 11°que toto, 3° basi et apice, 4°–9^{m} apice, nigris; pedibus piceo-nigris, femoribus anticis obscure fulvis.

Long. $3\frac{1}{2}$ lin.

Hab. GUATEMALA, San Gerónimo (*Champion*).

One example only. The head and thorax are broader and more robust than in the other species of the genus, but the long antennal scape and the pubescence of the joints show that the species belongs to *Erana* rather than to *Cephalodina*.

ESSOSTRUTHA (p. 210).

Essostrutha cinnabarina (p. 210).

To the localities given, add:—MEXICO, Cuernavaca, Playa Vicente (*Sallé*), Tehuantepec (*Sumichrast*).

There is a male example in the Sallé collection, from Playa Vicente, evidently belonging to this species rather than to *E. fimbriolata*, judging from the red metathoracic episterna; but it is remarkable for the absence of the black spots from the thorax, of which, however, there are some faint traces of the hinder pair.

CEPHALODINA (p. 212).

Cephalodina crassiceps (p. 213).

To the locality given, add:—PANAMA, Bugaba (*Champion*).

CIRRHICERA (p. 213).

Cirrhicera sallæi (p. 214).

Var. *C. panamensis*. Maculis sulphureis elytrorum majoribus, interdum conjunctis plagam elongatam communem basi haud attingentem, efficientibus.

Hab. PANAMA, Volcan de Chiriqui, Bugaba, David (*Champion*).

The pale yellow spots on the sides of the ventral segments are the same in number in the sexes respectively as in Mexican typical examples, viz. in the ♂ two, in the ♀ four (of which that on the first segment is very small).

Cirrhicera championi (p. 214).

The number of pale yellow spots on the sides of the ventral segments is stated in the description to be five: this refers to the female only. In the male there is a small rounded spot on each side of the first three segments only. This constitutes a good character whereby to distinguish the species from *C. sallæi* and its varieties.

9. **Cirrhicera —— ?**

Hab. PANAMA (*Boucard*).

A single example of an apparently distinct species, in very bad preservation.

PHŒBE (p. 215).

Phœbe albaria (p. 215).

To the locality given, add:—COSTA RICA (*Van Patten*).

AMPHIONYCHA (p. 216).

Amphionycha druryi (p. 217).

To the locality given, add:—PANAMA (*Boucard*), Volcan de Chiriqui, Bugaba (*Champion*), Chiriqui (*Ribbé*).

Numerous examples from the localities above named and others received, during the progress of the present work, from Costa Rica, show that *A. druryi* is not constant in its distinctive marks from *Amphionycha spectabilis* (Drury). These marks (a broader black basal, and a broader and more oblique white subapical, fascia) are pretty general in Costa-Rican examples, but specimens occur in the same locality in which the marks are the same

as in Guatemalan specimens of *A. spectabilis*. In the Panama localities individuals occur in which the black belts are covered with bluish-grey pile; these approach *A. bifasciata*, but differ from it in the form of the belts and other features. *A. bifasciata* remains a tolerably distinct local form, peculiar to Chontales.

Amphionycha fraudatrix (p. 218).

To the locality given, add:—Costa Rica (*Van Patten*).

11. **Amphionycha sericipennis.** (Tab. XXV. fig. 16.)

Sat breviter oblongo-subcylindrica, supra deplanata, melleo-flava; elytris dimidio posteriori, metathorace, ventre, tibiis apice et tarsis, nigris; elytris supra (apice excepto), metasterno, et ventre, pube sericeo cinereo-flavo dense vestitis, colorem nigrum occultante; antennis tenuibus, laxe ciliatis, nigris, articulo 4° fere toto 5°que basi testaceis; capite magno, inter antennas lato et plano, vertice convexo; thorace quam caput cum oculis haud angustiori, breviter cylindrico, basi angustato, auro-sericeo; elytris apice sinuato-truncatis utrinque acute bidentatis, epipleuris bicarinatis margineque incrassato.

Long. 5–5½ lin.

Hab. Panama, Bugaba (*Champion*).

The black ground-colour of the apical half of the elytra, as well as of the metasternum and abdomen, is just visible through the dense clothing of laid blonde pubescence; a narrow apical fascia and the apical half of the epipleura remain black with black pubescence.

12. **Amphionycha chionides.** (Tab. XXV. fig. 17.)

Phœbe luteolæ similis, sed fronte haud tuberculata. Parva, angusta, clare rufescenti-fulva; antennis (apice nigro excepto) melleo-flavis, pedibus testaceo-albis, capite (occipite excepto), thorace vittis latis duabus, elytris basi (usque medium) utrinque vittis angustis duabus (una suturali), macula ovata versus apicem, apiceque intus, cretaceo-albis; capite inter antennas lato sed paullo depresso; thorace quam caput angustiori, cylindrico (lateribus medio rotundatis), conspicue punctato; elytris pube fulvo-aurea vestitis, striato-punctatis, apice singulatim rotundatis, epipleuris unicarinatis et pluripunctato-striatis; sterno vitta utrinque laterali cretaceo-alba.

Long. 3¼ lin.

Hab. Panama, Bugaba (*Champion*).

This charming little species may possibly belong to the genus *Phœbe*. The unique example, however, appears to be a male, and has no trace of the frontal tubercles or processes which alone distinguish *Phœbe* from *Amphionycha*.

13. **Amphionycha bicarinata.** (Tab. XXV. fig. 18.)

A. pluricostatæ proxime affinis. Elongata, lateribus parallelis, epipleuris altis; supra verticem, thorace vitta lata dorsali scutelloque, nigris, capite thoraceque lateribus ochraceis, elytris fulvescenti-rufis; corpore subtus pedibusque nigris nitidis, pro- et mesosterno medio femoribusque basi flavo-testaceis; capite inter antennas angusto, concavo; thorace antice gradatim angustato; elytris apice obtusissime rotundatis, subtilissime et densissime fulvo-rufo tomentosis, carinis utrinque validis nitidis parallelis duabus; antennis (♂) quam corpus vix longioribus, subtus sparsim breviter ciliatis.

Long. 5½ lin.

Hab. PANAMA, Volcan de Chiriqui (*Champion*).

One example only.

14. **Amphionycha pulchricollis.** (Tab. XXV. fig. 19.)

Sublinearis, nigra ; elytris (apice epipleurisque nigro-fuscis exceptis) clare fulvo-ochraceis, occipite vittis duabus antice convergentibus vittaque utrinque thoracis laterali et linea dorsali pallidius ochraceis ; antennis (articulis 1° et 2° nitide nigris exceptis) pedibusque (tarsis apiceque tibiarum nigris exceptis) melleo-flavis ; capite robusto, inter antennas mediocriter concavo ; thorace cylindrico, basi sat constricto ; elytris apice sinuato-truncatis, utrinque bidentatis, dente exteriori multo longiori, epipleuris altis striato-punctatis bicarinatis (carina inferiori antice obsoleta), dorso punctulato-striato. Antennis tenuibus sicut in *A. pluricostata* et *A. bicarinata* (♂) brevioribus, subtus ciliatis, articulis versus apicem multo abbreviatis.

Long. $4\frac{3}{4}$ lin. ♂.

Hab. GUATEMALA, San Gerónimo (*Champion*).

One example only.

15. **Amphionycha ocreata.**

Sat anguste cylindrica, nigro-fusca, erecte pilosa ; fronte thoraceque subtiliter albo-cinereo-tomentosis, hoc dorso posteriori plaga magna nigro-fusca ; elytris sutura fulvo-ochracea, metathoracis episternis ventreque rufo-testaceis, pedibus rufo-testaceis, femoribus apice tibiisque (posticis apice exceptis) nigris nitidis ; antennis tenuibus, subtus longe parum dense ciliatis (articulo 4° valde elongato), nigris, scapo subtus rufo-testaceo, articulis 3° apice, 6° basi, 4° et 5° totis, albo-testaceis ; capite inter antennas concavo ; thorace cylindrico ; elytris apice obtuse truncatis, epipleuris altis striato-punctatis carina superiori valida inferiori solum versus apicem elevata, dorso striato-punctulato.

Long. $4\frac{1}{4}$ lin.

Hab. PANAMA, Volcan de Chiriqui (*Champion*).

Similar in colours and shape to *Isomerida lineata*, ♂, from which its generic characters —the slenderer antennæ with relatively much longer third and fourth joints—amply distinguish it. It also resembles *A. pubicornis*, but is longer and narrower than that species.

ALAMPYRIS (p. 218).

Alampyris marginella (p. 220).

To the Mexican locality given, add :—Cerro de Plumas (*Höge*).

9. **Alampyris cretaria.**

Elongato-oblongo-ovata, breviter erecte pilosa, fusco-nigra ; thorace utrinque plaga magna quadrata, densissime et subtilissime cretaceo-albo tomentoso ; capite albo-tomentoso, vittis duabus frontalibus altera utrinque post oculum nigro-fuscis ; elytris sutura et margine fulvis ; antennis brevibus, scapo elongato gradatim clavato, articulo 3° quam scapus haud longiori, 5°–11^{m} valde abbreviatis, rufo-testaceis, articulis apice, scapo et articulis 8°–11^{m} toto, nigro-fuscis, scapo undique setoso, 2°–4^{m} subtus longe ciliatis; thorace antice angustato, post medium lateribus paullo tumidis ; elytris mediocriter convexis, epipleuris nec verticalibus nec carinatis, apice singulatim subacuminatim rotundatis, dorso confuse punctulatis ; ventre (♂ ?) immaculato ; femoribus anticis rufo-testaceis.

Long. 6 lin.

Hab. MEXICO (ex *coll. A. Turner*). Two examples, apparently males.

The large square spot on each side of the thorax is composed of extremely fine and compact tomentum of a chalky-white colour; it leaves a central vitta and a short basal fascia very neatly defined of the black general colour of the insect. The abdomen is wholly black.

10. **Alampyris (?) subcarinata.**

Quoad formam *A. fuligineæ* similis, sed differt elytrorum carina obtusa ante medium evanescente; fusco-nigra, antennis undique et corpore erecte pilosis; fronte, thorace vitta laterali obliqua, elytrisque margine laterali (prope apicem excepto), flavo-testaceis; femoribus 4 anterioribus antennarumque articulis 4° et 5° albo-testaceis, his tenuioribus sicut in *Amphionycha* articulisque 3° et 4° relative valde elongatis; capite inter antennas sat profunde concavo; thorace antice angustato; elytris prope apicem paullulum dilatatis, carina laterali obtusa ante medium evanescente, sed ibi epipleuris sat altis striato-punctatis, dorso æqualiter striato-punctatis.

Long. $3\frac{1}{4}$ lin.

Hab. PANAMA, Bugaba (*Champion*). One example only.

This species belongs but imperfectly to the genus *Alampyris*; the antennæ are nearly the same as in *Amphionycha*, and the elytra are striate-punctulate, and not irregularly punctulate as in all known species of *Alampyris*. The incomplete lateral carina and the colours and facies decide me to place the species here rather than in *Amphionycha*.

ISOMERIDA (p. 221).

Isomerida subdilatata (p. 221).

To the locality given, add :—COSTA RICA, Cache (*Rogers*); PANAMA, Bugaba (*Champion*).

Mr. Champion captured many examples of this species in the virgin forests of the low country; all were captured on the wing or sitting upon leaves, never about fallen timber.

4. **Isomerida cinctiventris.** (*Amphionycha cinctipennis*, Tab. XXV. fig. 20.)

I. albicolli proxime affinis, forsan ejus varietas geographica. Cylindrica, fulvo-ochracea; thorace interdum roseo vel partim albescenti, elytris apice raro nigro-fuscis, metathorace abdomineque nigris, segmento 4° albo-tomentoso; antennis sicut in *I. albicolli* ciliatis, nigris, articulis basi anguste pallidis; thorace cylindrico, angulis basalibus exstantibus, acutis; elytris apice truncatis, angulo exteriori breviter dentato, epipleuris altis bicarinatis carina inferiori apice longiori, dorso punctulato obsolete unicostato; femoribus flavis, tibiis tarsisque nigris.

Long. $4\frac{3}{4}$–$5\frac{1}{2}$ lin.

Hab. PANAMA, Bugaba (*Champion*).

Very near the common *I. albicollis* of Guiana and the Amazons. In that species, however, there are always two white ventral segments in both sexes, and the hind angles of the thorax are not so much prolonged. In the pale tawny-ochreous form of *I. albicollis* the legs are wholly of the same colour; this is therefore a distinguishing

character from the similarly coloured *I. cinctiventris*; the form of *I. albicollis* with black elytra has dark legs.

5. **Isomerida explanata.** (Tab. XXV. fig. 21.)

Nigra, elytris fuscescenti-fulvis; capite thoraceque nitidis irregulariter punctatis, hoc postice gradatim dilatato, angulis posticis prolongatis fulvo-maculatis; elytris dorso depressis, epipleuris postice mediocriter explanato-dilatatis, carina laterali valida recta ante apicem evanescente, apice singulatim angustatis et breviter truncatis ibique nigro-marginatis, dorso confertim hic illic sublineatim punctulatis; antennis subtus longe, articulis 3°–6^{m} densius, hirsutis.

Long. $4\frac{1}{4}$ lin.

Hab. PANAMA, Volcan de Chiriqui (*Champion*). One example only.

Allied to *I. subdilatata*, and the antennæ very similar, but the head and thorax much narrower and the elytra not convex, but flattened from base to apex. The colour is peculiar, tawny-ochreous or brownish on the elytra and black on the rest of the body, antennæ, and legs.

HEMILOPHUS (p. 221).

Hemilophus prolixus (p. 221).

To the locality given, add:—PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

The unique example which served for the original description was abraded in places, hence no mention was made of the continuance of the black vitta of the crown down the middle of the thorax, which is a conspicuous feature in well-preserved specimens. The seven apical joints of the antennæ are more or less pallid at the base.

The species varies in size from $3\frac{1}{2}$ to 6 lines.

TYRINTHIA (p. 222).

Tyrinthia xanthe (p. 223).

To the locality given, add:—PANAMA, Bugaba (*Champion*).

To the description of the thorax, it should be added that on each side there is a pale ochreous vitta, which is more distinctly visible in the well-preserved examples from the State of Panama than it is in the typical specimens from Chontales.

3. **Tyrinthia biformis.** (Tab. XXV. fig. 22.)

Parum convexa, postice gradatim mediocriter dilatata; capite thoraceque læte fulvo-ochraceis, illo vitta utrinque post oculum lineolisque duabus verticis nigris, hoc vitta lata dorsali (interdum obsoleta) nigra lineaque utrinque laterali pallide ochracea; antennis sicut in gen. *Malacoscylo* articulo 3° solum subtus dense barbato, supra pubescente, nigris, articulis 4°–10^{m} basi pallide testaceis, subtus sparsim ciliatis; capite inter antennas excavato, fronte (♂ ♀) convexa; thorace antice angustato, prope basin paullulum angulato-dilatato; elytris epipleuris ultra medium evanescentibus ibique carina crassa obtusa gradatim cum margine coalescente, apice singulatim subacuminatim rotundatis, punctulatis utrinque striis punctulatis 3 geminatis;

pectore ventreque nigris fulvo-sericeis; pedibus nigris, femoribus plus minusve, prosternoque (vitta laterali nigra excepta), fulvo-testaceis.

Elytra colore variant:—

1. Toto rufescenti-fulva.
2. Nigra, utrinque macula magna a basi usque medium, suturam haud attingente posticeque oblique delimitata, rufescenti-fulva.

Long. 4 lin.

Hab. PANAMA, Bugaba (*Champion*).

Among the ten examples examined there is no trace of intermediate gradation between the two distinct modes of elytral coloration above described. The form with black apical half of the elytra resembles very much *T. lycinella*, but that species has the base of the fourth antennal joint clothed with bushy pubescence like the whole of the third, as in the majority of the *Tyrinthiæ*, and the lateral carina of the elytra (more obtuse than in *T. biformis*, and scarcely to be termed a carina) does not coalesce with the lateral margin, but runs parallel to it.

4. **Tyrinthia photurina.** (Tab. XXV. fig. 23.)

T. biformi affinis, elytris similariter formatis. Elongata, parum convexa, postice gradatim paullulum dilatata, nigra, subopaca; capite antice rufo, thorace supra cinereo-ochracea macula magna triangulari medio-basali nigra, elytrorum carina incrassata cinereo-ochracea; antennis nigris, articulis 2°, 5° et 6° totis, 4° apice et 7° basi, albo-testaceis, 3° toto et 4° basi supra pilosis infra dense barbatis, 4° apice 5°–11^{m} totis infra ciliatis; capite inter antennas excavato; thorace trapezoideo; elytris apice singulatim subacute rotundatis, epipleuris ultra medium nullis, carina incrassata obtusa pone medium cum margine coalescente; coxis quatuor anticis et femoribus basi testaceis.

Long. $4\frac{1}{2}$ lin.

Hab. PANAMA, Volcan de Chiriqui (*Champion*).

LYCIDOLA (p. 224).

2. **Lycidola unicolor.**

L. belti quoad formam similis, sed differt supra toto fulvo-ochracea vel isabellina, antennisque (nigris) articulo 3° multo breviori incrassato. Subtus fusco-nigra, femoribus plus minusve ventreque apice fulvo-testaceis; elytris paullo post humeros dilatato-explanatis undique confertissime punctulatis utrinque costis quatuor subrectis.

Long. $6\frac{1}{2}$ lin.

Hab. PANAMA, Bugaba (*Champion*).

Differs from *L. belti* and other species of the genus in the much shorter third antennal joint, which is of similar length, thickness, and density of pubescence to the fourth joint; the dilatation of the elytra is not quite so wide, and its margin describes a much more regular curve.

3. **Lycidola isabellina.** (Tab. XXV. fig. 24.)

Quoad formam *Lycaneptiæ amictæ* (Klug) similis, sed ad gen. *Lycidolam* pertinet articulis antennarum 3° et 4° solum incrassatis et subtus barbatis. *Lycidolæ mimicæ* affinis, scapo sicut in hac specie elongato; differt

colore supra sicut in *L. unicolori* toto isabellino; antennis nigris (scapo piceo), articulis 5°–9ᵐ pallide testaceis; elytris mox post humeros (imprimis valde gradatim) explanato-dilatatis, prope suturam solum punctulatis utrinque bicostatis; abdomine pedibusque pubescentibus.
Long. $6\frac{1}{2}$ lin.

Hab. PANAMA, Bugaba (*Champion*).

This species and *L. mimica* form a subgroup, in which the antennal scape is considerably longer than in the rest of the genus. The dilatation of the elytra is rather wider and more gradual from the shoulder to near the apex than it is in *L. mimica* and *Lycaneptia amicta*.

4. **Lycidola eximia.**

Supra aurantiaca, elytris fascia recta versus basin alteraque apicali, nigris; antennis nigris, articulis 3° et 4° sicut in *L. unicolori* æqualibus; vertice thoraceque vitta mediana indistincta fusca; elytris paullo post humeros sat late explanato-dilatatis haud angulatis, undique confertim punctatis utrinque quadricostulatis; pectoris lateribus, ventre, tibiis et tarsis fusco-nigris, pectore medio femoribusque fulvo-testaceis.
Long. 5 lin.

Hab. PANAMA, Bugaba (*Champion*).

One example only.

ADDENDA.

TETROPIUM (to follow the genus *Spondylis*, pp. 14, 239).

Tetropium, Kirby, Fauna Bor.-Amer. iv. p. 174; Lacordaire, Gen. de Col. viii. p. 208.

A genus hitherto known only from the higher temperate latitudes of America, Europe, and Asia, whence five species have been described.

1. **Tetropium opacipenne.**

T. aulico relative multo longius, nigrum, fusco-pilosum; elytris opacis adpresso-pubescentibus, femoribus rufis; thorace fere sicut in *T. aulico* rotundato, confertim punctulato, dorso callis duobus lineolaque dorsali paullo minus dense punctatis; elytris costis vix perspicuis.
Long. $7\frac{1}{2}$ lin. ♀.

Hab. MEXICO, Jacale, Orizaba (*Sallé*).

One example.

2. **Tetropium auripilis.**

Præcedenti quoad formam simile. Nigrum, nitidum, pilosum; elytris cinnamomeis sericeo-aureo-pubescentibus; thorace (♂) paullo longiori, medio subangulatim dilatato, confertim punctato, dorso tricalloso; scutello nigro; elytris costis inconspicuis; pedibus nigris, nitidis, tarsis piceis.
Long. $7\frac{1}{2}$ lin. ♂.

Hab. MEXICO, Las Vigas (*Flohr, coll. Bates*).

One example.

OXYLYMMA (p. 288).

2. **Oxylymma cæruleocincta.** (Tab. XXV. fig. 25.)

O. telephorinæ affinis. Gracilis, testaceo-alba; capite nigro, thorace aurantiaco, elytris fasciis duabus cæruleis, altera basali (postice obliquata) altera mediana recta; antennis articulis 3°–5^{m} nigris; capite thoraceque punctis rotundis impressis; elytris confertim punctulatis, apice latis juxta suturam truncatis; metasterno, tibiis, femoribus apice supra tarsisque articulo 4° nigris.

Long. 4 lin. ♀?

Hab. PANAMA, Bugaba (*Champion*).

The muzzle is short and broad, nearly as in *O. telephorina*.

MANNOPHORUS (p. 327).

Mannophorus forreri (p. 327).

Hab. MEXICO, Ventanas (*Forrer*).

The locality for this species was accidentally omitted on p. 327

EUPOGONIUS (p. 352).

13. **Eupogonius** (?) ——.

Hab. GUATEMALA, Capetillo (*Champion*).

A single example, doubtfully belonging to this genus.

Tribe BRUCHIDES*.

Fam. BRUCHIDÆ.

This—one of the smaller of the families of Coleoptera—until comparatively recently was placed in the Rhyncophorous series, and is included in Schönherr's great work on the genera and species of Curculionidæ. It has, however, become of late years generally recognized that it cannot naturally occupy such a place, and it has consequently been detached from its old association, but no position for it has been adopted with unanimity. It is placed by Leconte and Horn, in the 'Classification of the Coleoptera of North America' (second edition, 1883), between the Chrysomelidæ and Tenebrionidæ. It would, however, be certainly more naturally placed if it were made to precede, instead of follow, the Chrysomelidæ (or Phytophaga), and in the present work it occupies such a position. It may be well to mention that though, as a matter of convenience, it is included in the same volume as the Longicornia, it is not to be inferred from this fact that there is any special affinity between the two aggregates.

Our knowledge of the Bruchides is not sufficiently advanced to enable any trustworthy generalizations to be made in reference to the species found in our region. Still certain figures may possess some interest. Only two or three genera are yet recognized in the family, and each of these has a very wide distribution. The total number of species described before this work was commenced was about 570. The number of recognized North-American species is about 50. The number here recorded as found in our region is 150, but of this number eighteen have not been seen by the writer and are more or less doubtful.

The members of this family have been unequally collected in different parts of our region: Mr. Champion secured many species in Guatemala and in the State of Panama, and the Mexican fauna is pretty well represented by the collections acquired from M. Sallé and Herr Höge; but, on the other hand, the Nicaraguan province is poorly represented, and from Costa Rica we have received scarcely any Bruchides. The South-American Bruchides are very inadequately known, so that little can be said as to the geographical distribution of these insects. I may, however, remark that I am acquainted with 51 Mexican species; that of this number seven occur also in the United States of North America, twenty-three † are found in Guatemala as well as in Mexico, and eight extend at least as far south as the State of Panama. It would thus appear that the Central-American region has but little in common with the United States of North America, for at present there is actually a greater community between

* By D. Sharp.

† In this computation the cosmopolitan species are not included.

the extreme northern and southern points of our region, though so widely separated, than there is between the Mexican province and the adjacent United States region. This conclusion is, however, invalidated by two great facts: first, that the Bruchides of the United States have not been thoroughly collated with those from our region (owing to the very imperfect condition of collections of this family a great many of the North-American species are quite unknown in Europe), so that there may be a greater community than is yet ascertained; second, that the borderland, where the greatest community between the two regions will be undoubtedly found to exist, has been inadequately explored.

BRUCHUS.

Bruchus, Linnæus, Syst. Nat. ed. xii. p. 604; Schönherr, Syn. Ins. Curc. i. et v.
Kytorhinus, Fischer, Mém. Soc. Imp. Mosc. ii. p. 298.
Pachymerus, Latreille, Fam. Nat. Règne anim. p. 386.
Adromisus, Gozis, Bull. Soc. Ent. Fr. 1881, p. cxiii.
Andromisus, id. Rev. d'Ent. iv. p. 125.

After separating *Caryoborus* this genus will still comprise about 500 described species, and is found in most parts of the World. The study of the insects of this genus is at present a matter of great difficulty, no recent monographer having dealt with it, and the arrangement suggested by Schönherr for the comparatively small number of species known to him being eminently unsatisfactory. Indeed all the structural characters appear to grade off again and again in the genus, so that no one of them, as far as I have observed at present, can serve the purpose of dividing the species even in a preliminary manner. The specific distinctions in fact frequently consist of modifications of the very characters that have been used to define the groups of species. Schönherr relied on the dilatation of the femora and on the shape of the thorax, but each of these characters is among the most variable of the genus. Dr. Horn has lately employed the denticulation of the hind femur with satisfactory results so far as the North-American species are concerned; but this will not help much as a means of facilitating determination of the more numerous species found in our region. In our species the normal denticulation of the femur in the genus appears to be one long tooth and two small denticles, and this character occurs in several forms that in other respects are very dissimilar; but, on the other hand, species that are very closely allied differ in the number of denticles. The femoral denticulation, therefore, though of great importance, can only be employed in subordination to other characters, and its value in any case as a means of arrangement is largely discounted by the great number of species that fall into the category of one tooth and two denticles; thus it happens that Dr. Horn in arranging the North-American species into nine groups, has to place half the species in one of these. I have, for the purpose of facilitating the labour of

those who may have to use this work, adopted a number of groups of convenient size, and sufficiently natural, for our fauna at any rate, to enable any one who has become acquainted with a few species of each group to recognize, on a first inspection, with tolerable certainty, to which group any other species should be referred. I cannot, however, disguise my knowledge of the fact that the determination from the description alone of the numerous species I have characterized will be a difficult task, and that a certain amount of reference to some of the types described will be almost indispensable.

The species previously described from our region are not numerous, and are due chiefly to Schönherr, Say, and Motschoulsky. The species intended by this latter author will, I think, in the majority of cases, never be recognized, owing to the peculiar method he adopted in dealing with them. This consisted in characterizing in two or three lines in a most insufficient manner certain groups, and then dividing and subdividing these groups analytically. I have not been able to recognize any of the species he dealt with in this way; but in the same paper he described some species in a more ordinary manner, and about most of these I have been able to form an opinion.

It has of late been proposed to abandon, on the ground of priority, the generic name of *Bruchus*, replacing it by that of *Mylabris*, which for about one hundred years has been in use for a totally different genus of Coleoptera. The confusion introduced into entomological literature by this proceeding is enormous, and as the proposed change has no advantage other than its conformity with a theory of priority of generic names, and as no inconvenience has been found to result from the nomenclature that has been in use for a hundred years, I have not been able to adopt the change proposed. Owing to the constant shifting and division of genera that naturalists require to make, no absolute test of priority can be applied with advantage to long-established generic names; and it appears to me inadvisable to render this part of our Zoological literature a mass of confusion because Des Gozis thinks Fabricius ought one hundred years ago to have used Geoffroy's name of *Mylabris* for this aggregate of species instead of the Linnæan name *Bruchus*. The name *Andromisus*, proposed by Des Gozis to replace *Pachymerus*, is at present superfluous, as the group is incapable of definition in the actual condition of our knowledge.

§ 1. *Thorax conic, its sides concavely arcuate; hind femora largely dilated, armed with teeth that in many species are numerous; antennæ various in structure.* (Pachymerus, Latr.)

Schönherr included in his Grex "Pachymeri" a "Stirps II." (possessing, however, only a single species) for an insect with elongate and serrate antennæ. I have thought it better to place two analogous species in my group § 3. Even as I have limited it the Group still remains a heterogeneous one, comprising a number of forms having little relationship *inter se*. In our fauna the concavely-arcuate sides of the thorax is a tolerably satisfactory character for the diagnosis of this group.

1. **Bruchus brasiliensis.**

Bruchus brasiliensis, Thunb. Act. Holm. 1816, i. p. 45, t. 2. f. 1[1]; Schön. Curc. i. p. 85[2].
? *Pachymerus fuscicrus*, Motsch. Bull. Mosc. 1873, p. 244[3].

Hab. NICARAGUA, Chontales (*Janson*); PANAMA [3], Bugaba, San Feliz (*Champion*).—SOUTH AMERICA [1 2].

A small series of ten examples from our region exhibits much variation, but I am unable to distinguish more than one species. The characters by which the species is best distinguished from *B. longicollis* are the larger size, the greater amount of dark colour on the elytra, the dark (nearly black) palpi and hind tibiæ, and the existence in the males of a prominence above the middle of the pygidium limited below by a V-like impression. In the example (a female) from San Feliz the size is not greater than that of *B. longicollis*, and the palpi are pallid. The peculiarities of the male pygidium show much difference in the extent of their development, and the colour of the hind tibiæ varies a good deal in its depth. Under these circumstances I conclude that *P. fuscicrus*, Motsch., must probably be one of the smaller and more pallid varieties.

2. **Bruchus longicollis.**

Bruchus longicollis, Fåhrs. Schönh. Curc. v. p. 117 [1].
? *Pachymerus tuberculatus*, Motsch. Bull. Mosc. 1873, p. 244 [2].

Hab. MEXICO [1], Cordova (*Sallé*); GUATEMALA (*Sallé*), Capetillo, Chacoj (*Champion*); NICARAGUA, Chontales (*Belt*); PANAMA [2], Bugaba, Volcan de Chiriqui below 4000 feet (*Champion*).

In this species the pygidium of the male does not exhibit any peculiarity, and the palpi and hind tibiæ are usually pale yellow. The size varies greatly, and about half of the examples from Bugaba are referable to a variety only half the size of the type; occasionally the palpi are more or less spotted with dark colour, and in the larger individuals the hind tibiæ are castaneous-yellow; there is great variation in the maculation of the upper and under surfaces. I think it probable that Motschoulsky's *P. tuberculatus* will prove to be one of the varieties of this species.

3. **Bruchus longifrons.** (Tab. XXVI. fig. 1.)

Capite angusto, oculis a thorace remotis; pallide ferrugineus, parce griseo-vestitus; capite fusco, prothorace in medio fusco-lineato; antennis pedibusque testaceis, illis minus clavatis, articulis penultimis plus minusve infuscatis; elytris vix pallido-submaculatis, versus apicem indistincte fusco-maculatis; metasterno in medio minute angulariter prominulo.

Long. $4\frac{1}{2}$ millim. (capite porrecto).

Hab. PANAMA, Bugaba, David (*Champion*).

This insect is allied to *B. longicollis*—though very distinct even from the smallest varieties of that species—by its smaller size, narrow elongate head with eyes farther

removed from the thorax; the armature of the femora is similar to that of the allied species, viz. a long acute tooth near the apex, and almost or quite on the outer margin of this tooth two or three other smaller denticles; these supernumerary denticles in the present species are short and obtuse. The thorax has the sides a little concavely arcuate, but the hind angles are only slightly acute, and the surface is free from sulcation or tuberculation, the median longitudinal dark portion being only obscurely elevated. The variegation of the elytra is slight and indefinite; there is only a very faint humeral elevation, and there are no callosities or depressions. The pygidium and under surface are so sparingly clothed that the ground-colour remains conspicuous. The posterior tibiæ are slightly arcuate at the base, and are armed at the extremity with a very elongate, acuminate spine. There is a considerable difference (no doubt sexual) in the structure of the antennæ of the individuals of this species; these organs are in some examples similar to those of *B. brasiliensis*, except that they are not so broad, while in the other sex they are considerably longer, reaching back beyond the base of the thorax, and with the penultimate joints each as long as broad. I am not able to find any difference in the pygidium or ventral plates of these two forms, so do not know which is the male.

Four examples were met with; our figure represents an individual with the longer antennæ found at Bugaba.

4. **Bruchus albotectus.** (Tab. XXVI. fig. 2.)

Convexus, corpore postico subquadrato; densissime pallide griseo-vestitus, fusco nigroque plus minusve vage maculatus; antennis pedibusque anterioribus rufis, illis articulis penultimis infuscatis; pedibus posterioribus nigro-rufis, femoribus albido-nebulosis ad apicem dente elongato denticulisque tribus minoribus armatis; antennis subclavatis.

Long. $4\frac{1}{2}$ millim. (capite deflexo).

Hab. MEXICO, Toxpam, Cordova (*Sallé*); BRITISH HONDURAS, Rio Hondo (*Blancaneaux*); GUATEMALA, San Gerónimo, Zapote, Mirandilla, San Joaquin, San Isidro, Pantaleon, Chiacam, Volcan de Atitlan 2500 to 3500 feet (*Champion*); PANAMA, Bugaba (*Champion*).

Similar in form to *Bruchus longicollis*, but densely clothed above with pallid pubescence, which is maculate only at the margins, and readily distinguished by the structure of the head and breast. The former is elongate and narrow, but not to so great an extent as in *B. longicollis*, and the constriction to form the neck is situated immediately behind the eyes; the metasternum, though nearly perpendicular in front, does not project as an angular prominence. The antennæ reach as far back as the base of the thorax, joints 6–10 being each broader than long. The thorax is very narrow in front, broad behind, the sides concavely curvate, the hind angles acute, the surface densely clothed with pallid pubescence, which is more or less distinctly maculate with fuscous and black spots. Elytra also densely clothed with pallid pubescence, concealing the striæ,

which are fine, more or less maculate at the outer margins, this lateral maculation behind the middle extending inwards so as to form a rudimentary band of spots. Breast very densely, ventral segments less densely, clothed with pallid pile.

5. **Bruchus ruficornis.**

Pachymerus ruficornis, Chevr. Ann. Soc. Fr. Bull. 1877, p. xc[1].

Hab. Mexico (*Ott*[1]).

A diagnosis *l. c.* is given without any comparative remarks, and no reference is made to the structure of the antennæ, or breast, or the armature of the femora; but as I am still not able to find any species agreeing with the other characters given I must conclude this is a species we have not received.

6. **Bruchus cristicollis.**

Convexus, elytris quadratis, supra variegatis; prothorace valde inæquali, medio inæqualiter longitudinaliter elevato, elevatione sulcata; pygidio densius longiusque pallide ochraceo-vestito, apicem versus trinoduloso; femoribus posterioribus subtus ultra medium dente longiore armato, et ad apicem dentibus plurimis irregularibus.

Long. 4 millim. (capite deflexo).

Hab. Mexico, Yolos (*Sallé*).

This is of about the size and form of *B. longicollis*, but is not closely allied to that species nor to any other known to me. Only a single example has been received, and from this I judge that the species will be readily recognized by the very uneven surface of the thorax, and from the fact that the pubescence of the upper surface is not so short as usual, and thus the maculations on the elytra are many of them slightly raised patches. The head is evidently rostrate, but rather broad; the eyes moderately prominent, widely separated in front. The thorax is very narrow in front, the sides arcuately concave, the hind angles very acute, the surface with two irregular ridges along the middle; these ridges rise behind so as to form a considerable prominence a little distance in front of the scutellum, and between their highest point and the scutellum are clothed with more pallid pubescence, like that on the scutellum; on either side in front of the base there is a small but rather elevated prominence. The elytra are of a dark vinous-fuscous colour, and bear geminate series of quite distinct punctures, and are spotted with slightly raised patches of griseous and nearly black pubescence. The anterior legs are red; the posterior legs and the greater part of the under surface, black, the sculpture not so fine as usual; the hind tarsi red. The metasternum is nearly flat, obliquely declivous in the middle in front. The armature of the hind femur differs from what obtains in *B. longicollis*, inasmuch as the smaller teeth are quite separated from the anterior one; they are irregular in size and four or five in number, rather crowded together, the outer of them minute.

7. **Bruchus serratissimus.**

Convexus, elytris oblongo-quadratis; densius vestitus, variegatus; prothorace anterius angusto, subinæquali, medio fusco-bilineato; elytris nigro-fuscis, griseo-variegatis; pygidio medio fusco, utrinque albido; corpore subtus pallide griseo-vestito; antennis sat elongatis, apicem versus paullulum crassioribus, testaceis, articulis penultimis fuscis; femoribus posterioribus maxime dilatatis, subtus dimidio posteriore dense pectinato.

Long. 3 millim. (capite deflexo).

Hab. GUATEMALA, Paso Antonio 400 feet (*Champion*).

Of this species only a single example was obtained, pretty certainly a female; though apparently allied to *B. boops*, it possesses some important distinctions. The head is broad and short, the eyes only slightly prominent, finely granulate. The thorax has the sides arcuately concave, the hind angles acute, the base strongly lobed in the middle, the surface slightly uneven, without any peculiarity in front of the scutellum. The four anterior legs are yellow. The hind femur bears a sort of elevated lamina on the lower half, the lower margin of which is pectinate, the teeth being thirteen in number, the inner one twice as long as any of the others. The metasternum is nearly flat, without angular prominence or declivous front portion.

8. **Bruchus juno.**

Brevis, convexus, elytris quadratis, variegatis; antennis pedibusque anterioribus testaceis, illis articulis penultimis nigricantibus, articulis 5°–10^{m} intus prolongatis; capite breviter rostrato, oculis prominulis, vertice carinato; prothorace anterius angusto, pallide fusco-tomentoso, subvariegato, ante scutellum elevato, ibidemque triangulariter albido; elytris subtiliter striatis, fusco-tomentosis, nigro albidoque maculatis, posterius nigricantibus; pygidio niveo-tomentoso, utrinque nigro maculato; corpore subtus griseo-vestito, parapleuris plaga maxima nigerrima; pedibus posterioribus nigris, femoribus pallide fusco-vestitis, tarsis rufescentibus; femoribus valde incrassatis, subtus versus apicem dentibus sex instructis, dente anteriore quam ceteri paullo longiore.

Long. 2 millim. (capite deflexo).

Hab. GUATEMALA, Mirandilla (*Champion*); PANAMA, David, Volcan de Chiriqui 4000 feet (*Champion*).

This elegant little insect differs from the true *Pachymeri* in the structure of the antennæ, which in the female have the penultimate joints a good deal produced in front, while in the male they are strongly pectinate; the peculiar angular white mark in front of the scutellum encloses a small depression; the middle of the breast is rather convex, but not in the least angular, and the apex of the mesosternum between the front coxæ descends to the lower part of the breast. The structure of the hind femora is a considerable approximation to that of the genus *Caryoborus*, but the prothorax is extremely different from that of *Caryoborus*, and is of the normal *Pachymerus* type.

Four examples were met with; the elytra of the one found at David are not nigrescent behind.

9. **Bruchus godmani.** (Tab. XXVI. fig. 3.)

Convexus, elytris quadratis; densius vestitus, fusco-ochraceus; elytris ferrugineis, subvariegatis, versus suturam plaga fusca ornatis; pygidio utrinque versus apicem fusco-notato; prothorace anterius angusto, ante scutellum elevato ibidemque lineis duabus brevibus anterius conjunctis spatiam angustam depressam includentibus; femoribus posterioribus versus apicem dente elongato, et quatuor brevioribus armatis; antennis maris longissime ramosis.

Long. 3½ millim. (capite deflexo).

Hab. PANAMA, Bugaba (*Champion*).

Only a single example of this graceful insect was obtained, and no doubt it is a male. It is allied in many respects to *B. juno*, but the armature of the femora is intermediate between that of the species just mentioned and that of *B. brasiliensis*; the four teeth joined to the larger one are each shorter than its predecessor, the first of them evidently springing from the long tooth. The rest of the structure seems very similar to that of *B. boops*.

10. **Bruchus calderensis.**

Convexus, pallide griseo-vestitus, parum variegatus; antennis pedibusque anterioribus testaceis, illis apicem versus crassis, articulis penultimis fuscis; elytris ad humeros et ad marginem exteriorem minus argute nigro-maculatis; pedibus posterioribus nigro-fuscis, griseo-vestitis, tarsis testaceis; metasterno anterius leviter declivo; femoribus posterioribus dente elongato posterius tridenticulato armatis.

Long. 3 millim. (capite deflexo).

Hab. PANAMA, Caldera in Chiriqui 1200 feet, Tolé (*Champion*).

This species is allied to *B. albotectus*, but is not half the size of the smallest examples of that species, and the metasternum is more rounded and gently declivous in front. The thorax is very narrow in front, with the sides concavely arcuate and the hind angles acute, a little raised longitudinally along the middle, and a little depressed on each side the middle near the base so as to cause a not very well-marked callosity on each side; it is densely clothed with pallid griseous pubescence and only very obscurely maculate. The elytra are very finely striate, the striation being concealed by the very dense pallid pubescence, which is maculate only at the shoulders and at the sides a little behind the middle; they are without depressions or elevations. The pygidium is densely clothed with pale tomentum, and not distinctly maculate. The under surface is blackish, clothed rather closely with pallid pile. The antennæ have the joints 6–11 each broader than long. The hind femora are strongly arched above, little inflated beneath, armed near the extremity with a long acute tooth, and with three smaller teeth forming an extension backwards of its posterior margin, much as in *B. longicollis* and the allies; the tibial spur is elongate, quite as long as the entire breadth of the tibiæ at its extremity.

I do not observe any sexual differences among the four examples that were obtained of this species.

11. **Bruchus confinis.**

Convexus, dense pallide griseo-vestitus, parum variegatus, prothorace medio late brunescente; elytris, præsertim

versus latera, submaculatis; antennis brevibus, latis, nigris, basi pedibusque anterioribus rufis; metasterno anterius fere plano; femoribus posterioribus dente sat elongato, tribusque minoribus a dente elongato bene separatis, instructis.

Long. $2\frac{3}{4}$ millim. (capite deflexo).

Hab. GUATEMALA, Zapote, San Gerónimo (*Champion*); PANAMA, Bugaba, Volcan de Chiriqui (*Champion*).

Antennæ short and broad; joints 6–11 each broader than long, dark in colour, the terminal joint not paler. Thorax very narrow in front, with concavely arcuate sides and acute hind angles, at the base with a depression on each side of the scutellar lobe. Elytra feebly striate, densely covered with pubescence, which is principally pallid, but is broken up at the sides by rather indefinite darker spots. Pygidium narrow, very elongate, clothed with pale pubescence, and indistinctly striped with still paler pubescence. Legs much clothed with pubescence; spur of the posterior tibia short and stout.

Though bearing a considerable resemblance to *B. calderensis* this species is really very distinct by the short apical tibial spur and the different position of the minor teeth of the femur.

Only one example was found at each of the localities mentioned.

12. **Bruchus incensus.** (Tab. XXVI. fig. 4.)

Convexus, niger, supra griseo albidoque minus variegatus; subtus pallide vestitus, pygidio dense griseo-vestito, antennis basi et articulo ultimo, tibiis tarsisque anterioribus rufescentibus; antennis brevibus, crassis; elytris subinæqualibus; femoribus posterioribus dente elongato quatuorque denticulis instructis.

Long. $3\frac{1}{4}$ millim. (capite deflexo).

Hab. PANAMA, Volcan de Chiriqui, Bugaba (*Champion*).

Although very dissimilar in colour to *B. confinis* this species is closely allied thereto, but has the femora rather differently armed and the surface of the thorax and elytra less even. The thorax is distinctly elevated along the middle, and has a callosity on either side, near which a few coarser punctures may be distinguished, though much concealed by the vestiture; the scutellum is clothed with pale pile, and there is a minute spot of similar colour on the base of the thorax in front of this; the coloration of the thorax is chiefly dark, but there are on it several irregular paler marks. The prevalent colour of the elytra is dark, but they are obscurely lineate on the alternate interstices with fuscous colour; this is distinct near the suture, but elsewhere indistinct, and there are also small indefinite flecks of white colour; there is a slight callosity between the shoulder and the scutellum, and the surface is also rendered uneven by some obscure depressions; the pygidium is densely clothed with pallid pubescence, which is subvariegate. The hind legs are dark, the femora variegate with pubescence; the four smaller denticles of the femora all distinct from the longer tooth; the apical spur of the tibiæ rather short.

Six examples were met with; five of these were found on the Volcan de Chiriqui, only one or two specimens at a time.

13. **Bruchus pictifemur.**

Convexus, subtus (cum femoribus posterioribus) nigro rufoque coloratus, pallide vestitus, supra nigricans, fusco albidoque variegatus, in elytris hic inde vage rufescens; antennis subcrassis minus brevibus, cumque pedibus anterioribus testaceis; femoribus posterioribus dente sat elongato denticulisque circiter sex instructis.

Long. 3 millim. (capite deflexo).

Hab. MEXICO, Jalapa (*Höge*).

In this species the antennæ are more slender outwardly, and subserrate, the penultimate joints being scarcely shorter than broad. The thorax has no inequalities, but its sculpture can be distinguished through the vestiture. The elytra are chiefly black with indistinct red patches, the ground-colours being, however, concealed by the pubescence; they bear numerous series of coarse punctures, three or four of these series between the shoulder and scutellum terminating in a slightly arcuate or angular elevation; the maculation is indefinite. The pygidium is narrow and very elongate, densely clothed with pale pile, subvariegate. The lower half of the hind femur is black, the upper part red; the six supernumerary teeth form a curvate prominence. The metasternum is not declivous in front; the tibial spur moderately long.

Three examples have been received of this species.

14. **Bruchus scutellaris.**

Bruchus scutellaris, Fabr. Ent. Syst. ii. 1, p. 372; Gyll. in Schönh. Curc. i. p. 33 [1]; Horn, Trans. Am. Ent. Soc. iv. (1873), p. 317 [2].

Hab. Fere in ORBE TOTO; NORTH AMERICA [2].—PANAMA, Bugaba, Volcan de Chiriqui (*Champion*).—SOUTH AMERICA, Brazil [1].

The position of this species should for present convenience be among the smaller *Pachymeri*, the penultimate ventral plates being very abbreviate and the femora sufficiently dilated; the structure of the femur is, however, very different from any other of the group, and the concave arcuation of the sides of the thorax very slight. It is recorded in the Munich Catalogue, x. p. 3222, as a synonym of *Bruchus chinensis*, Linn. & Thunb.; but this is apparently erroneous, as also is the fact that in the same work the only record given for *B. scutellaris*, Fabr. & Gyll., is "Cap. bon. spei." On reference to the works in question it will be found that Fabricius gives no locality, and that Gyllenhal [1] says, "habitat in seminibus utriusque Indiæ, etiam ad Caput bon. spei et in Brasilia." In settling the synonymy of this species we are thus deprived of the assistance usually derived from the citation of a limited "habitat." Only two examples from our region have reached me.

15. **Bruchus salvini.** (Tab. XXVI. fig. 5.)

Convexus, dense vestitus, nigro, fusco albidoque variegatus; pygidio albido, antennis pedibusque anterioribus rufis; antennis elongatis, apicem versus parum crassioribus, articulis 5° ad 10^{m} intus subserratis; prothorace

conico, subinæquali; femoribus posterioribus dilatis, subtus dentibus 7 vel 8 armatis, tibiis valde curvatis, apice calcari parum elongato armatis.
Long. 4 millim. (absque capite).

Hab. GUATEMALA, Capetillo (*Champion*).

Head broad, evidently rostrate; eyes prominent. Antennæ a good deal longer than the head and thorax; second joint very small in comparison with the third. Thorax very narrow in front, the sides feebly concavely arcuate, the hind angles very acute, the posterior portion more elevated than the anterior; clothed with pubescence chiefly of a griseous colour, with a curved series of six indefinite black spots across the middle; numerous coarse punctures are visible through the clothing. Elytra marked with fuscous and black, with a white spot on each close to the middle of the suture, and also with a few small white flecks. Pygidium and ventral plates densely clothed with white pubescence. Hind femora thickly clothed with pallid griseous pubescence.

This species is not allied to any other found in our region, but may be placed in Stirps II of Schönherr's Grex II. The metasternum is flat; the femoral armature consists of a raised ridge armed with about eight teeth, the anterior tooth of the series being broken off in the example obtained; the apical ventral plates are evidently only extremely abbreviate in the middle.

16. **Bruchus columbinus.** (Tab. XXVI. fig. 6.)

Convexus, fusco-rufus, obscurus, griseo-vestitus, elytris hic inde subguttatis; capite lato, oculis haud magnis, distantibus; antennis pedibusque anterioribus testaceis, illis brevibus crassis, intus subserratis; prothorace elongato, conico, dorso fortiter punctato; femoribus posterioribus valde dilatatis, dente elongato denticulisque tribus armatis; pygidio elongato, obliquo; segmentis ventralibus apicalibus haud abbreviatis.
Long. $5\frac{1}{2}$ millim. (capite deflexo).

Hab. GUATEMALA, Rio Maria Linda 500 feet (*Champion*).

The eyes are quite finely granulate, not very prominent, widely separated; beak very short. Antennæ with four basal joints slender, the others broad. Thorax very narrow in front, the sides concavely arcuate, the surface even, covered with a pale griseous pubescence, which allows the numerous deep punctures to be seen. Elytra finely striate, covered with slightly variegate pubescence in colour like that of the thorax, but here and there rather darker, and paler, and interrupted by rather more distinct oblong darker spots. Pygidium pubescent like the thorax, distinctly punctate. Hind femora armed with a long pointed tooth, and close to it, the anterior in fact on it, with three smaller but very distinct teeth. Hind tibiæ moderately curvate, armed with long apical spur. Terminal ventral plate emarginate in the middle and subtuberculate on either side of the emargination.

This is a most anomalous species, the thorax and hind legs having the structure of the *Pachymerus* group, but the construction of the hind body is quite different and nearer to *B. humeralis* and its allies. Unfortunately only one example was met with.

17. **Bruchus aberrans.** (Tab. XXVI. fig. 7.)

Convexus, subtus albido-griseo-vestitus; supra nigro-fuscus, prothorace ochraceo bilineato, elytris versus suturam nigro ochraceoque submaculatis; pygidio nitido, apicem versus albido notato; abdomine ad latus utrinque nigro, nitido; pedibus anterioribus testaceis, posterioribus nigris, tarsis testaceis; antennis clavatis, articulis 5° ad 11ᵐ longitudine laterioribus; femoribus posterioribus inflatis, subtus externe multiserratis, interne a medio ad apicem dentibus irregularibus minus elongatis, circiter sex, instructis.

Long. 4–5 millim.

Hab. Panama, David, Bugaba, Taboga Island (*Champion*).

This is a very peculiar species, apparently not nearly allied to any known form. The very broad antennæ, the strongly and regularly arcuate tibiæ, and the remarkable adornment of the pygidium make it easily recognized. The head is somewhat narrow and rostrate, but much less so than in *B. brasiliensis*. The thorax is very narrow in front, much broader behind, with the sides concavely arcuate and the hind angles acute, the base strongly lobed in the middle. The elytra are finely punctate-striate. The pygidium is finely pubescent and dull at the base, but beyond this is shining and sparingly punctate, and adorned with a narrow mark of very dense white pubescence, which in the female forms an oval spot separated by about its own length from the hind margin, but in the male is more elongate so as to reach the extremity.

A series of fourteen examples was obtained showing considerable variation in size and in the depth of the ground-colour, which is sometimes nearly black, sometimes of a dark vinous-red tinge. The example figured is a female from David.

The antennæ and general form suggest that this should belong to the subgenus *Pachymerus*, but the different armature of the femora, and the fact that the metasternum is not perpendicular in front will necessitate the isolation of the species in a separate subgenus or genus.

§ 2. *Thorax conic, its sides either not curvate, or slightly convexly arcuate; hind femora only moderately dilated, armed with a tooth and one, two, or three denticles; antennæ rather short, simple, only subserrate; ventral rings never elongate, the penultimate three usually very short; pygidium usually perpendicular.*

This group, so far as our species are concerned, is homogeneous, but it is approximated by various members of Groups § 1, § 3, § 4, § 5, and § 6.

18. **Bruchus mundulus.**

Convexus, niger, fusco albidoque variegatus, antennarum basi pedibusque rufis; prothorace pygidioque singulo ad basin in medio macula conspicua albida; femoribus posterioribus sat dilatatis, dente parum elongato denticulisque omnium minutissimis duobus instructis.

Long. $2\frac{1}{2}$ millim. (capite deflexo).

Hab. Mexico, Guanajuato (*Sallé*).

Antennæ short and very broad; five basal joints red, the others black and strongly

transverse. Head short, eyes moderately separated. Thorax elongate, very narrow in front, the sides slightly concavely oblique, the surface densely covered with pubescence concealing the coarse punctuation, the pubescence chiefly flavo-griseous, but with nearly black marks on the front and middle, and an elongate triangular white mark at the base. Scutellum clothed with white pubescence. Elytra finely but deeply striated, variegate with the same colours as the thorax arranged transversely but irregularly, and the white markings consisting only of a few small isolated spots. Pygidium clothed densely with flavo-griseous pubescence, but with an elongate very conspicuous white mark at the base in the middle, and on either side of its apex a black spot. Under surface variegate with black, white, and yellowish-grey.

B. mundulus differs in several important particulars from *B. pictifemur*, the species to which it is most similar in facies—the apical ventral plate being very short, and in the middle very reduced by the incurvation of the apex of the pygidium, the armature of the femora consisting of a small tooth and two scarcely perceptible denticles near it, and the apical spur of the tibiæ being very short, though slender and definite. Only one example is known to me.

19. **Bruchus cordifer.**

Testaceo-ferrugineus, tenuiter griseo-vestitus; elytris ad apicem macula magna communi nigro-fusca; antennis pedibusque testaceis; femoribus posterioribus latis, dente gracili denticulisque minutis duobus instructis.
Long. $2\frac{1}{4}$ millim. (capite inflexo).

Hab. GUATEMALA, San Joaquin in Vera Paz (*Champion*).

Antennæ not stout, subserrate internally, the penultimate joints only slightly broader than long. Eyes moderately distant. Thorax narrow in front, conical, clothed with a pallid pubescence, not variegate. Elytra very finely striate, clothed with pubescence like the thorax, but at the extremity with a common, conspicuous large cordate mark. Pygidium clothed rather densely with nearly white pubescence. Spur of hind tibia quite short.

Only a single example of this minute species was obtained. The penultimate ventral rings being very short and the hind legs incrassate would place it in Schönherr's *Pachymeri*, it being in the structure of the antennæ intermediate between his Stirps I and II.

20. **Bruchus celatus.**

Brevis, convexus, rufus; capite corporeque subtus in medio nigris; antennis pedibusque testaceis; prothorace transversim conico, pallide flavo subvariegato; elytris post basin fascia lata pubescentiæ sparsæ pallida; femoribus posterioribus haud incrassatis, denticulo parvo acuto instructis.
Long. $2\frac{1}{2}$ millim.

Hab. PANAMA, Bugaba (*Champion*).

Antennæ short and broad, not serrate; third joint scarcely longer than the second, 6–10 each broader than long. Head small, eyes widely separated, vertex not carinate.

Thorax dark red, indefinitely marked with shining pallid pubescence, rather coarsely punctate, greatly narrowed in front. Scutellum with two minute patches of dense nearly white pubescence. Elytra of an obscure rufous colour, with a dark mark round the scutellum, and behind this a broad pallid band; finely striate. Pygidium very elongate, clothed with pallid subochreous pubescence. Hind tibiæ not arcuate, prolonged at the apex to form a very short sharp spur.

This species agrees with the *Bruchi* with conical thorax of Schönherr's Grex I, Stirps I, Manipulus I, but has the pygidium formed as in the *Pachymeri*. Only two examples have been obtained.

21. **Bruchus lituratus.**

Convexus, rufus; antennis crassis fuscis, thorace lineis tenuissimis duabus ornato; elytris fascia angusta mediali albida; pygidio basi albido-pubescente; corpore subtus tenuiter griseo-vestito, parapleuris coxisque posterioribus fusco-rufis, albido-maculatis.

Long. $2\frac{1}{2}$ millim. (capite deflexo).

Hab. PANAMA, Volcan de Chiriqui 2500–4000 feet (*Champion*).

This species is very distinct on account of its remarkable coloration, but it also is structurally peculiar, as by the abbreviation in the middle of the three penultimate ventral segments it accords with the small species of the *Pachymerus* group, while by its other characters it might be placed in Schönherr's Manipulus I of Grex I. The three basal joints of the antennæ are small and red in colour, the other joints being much larger; joints 6–10 each broader than long, red, but clothed with a dark fuscous pile. The thorax is transversely conic, the sides oblique, not concave; surface quite even, red in colour, near each side with a very fine line formed by three connected, very slender guttæ, and there is also a very minute pallid spot in front of the scutellum. The elytra are red, and have across the middle a very slender angulate white band; this band is connected on each wing-case with a few minute transverse pallid spots near the outside, so that the band appears furcate on each elytron. The posterior femora are armed with one rather short tooth; the tibiæ are rather short and stout, curved only slightly at the knee, and with a short apical spur; basal joint of hind tarsus very long.

22. **Bruchus suaveolus.** (Tab. XXVI. fig. 8.)

Niger, albido-vestitus; elytris dimidio basali nigro-vestito, albido-signato; antennis pedibusque rufis, femoribus posterioribus nigris, apice rufo, albido-vestitis; femoribus posterioribus dente gracili denticuloque minuto bifido instructis.

Long. $2\frac{1}{2}$ millim. (capite deflexo).

Hab. NICARAGUA, Chontales (*Janson*); PANAMA, Volcan de Chiriqui, Tolé (*Champion*).

Antennæ pale red, short; joints 5–10 transverse. Head short. Thorax conic, scarcely transverse, covered with a pale ashen pile; the sculpture is rather coarse, though much concealed by the clothing. Elytra with the basal half black, an abbreviated transverse

fascia at the extreme base, including the scutellum, white; a short sutural mark extending backwards from this of the same colour, as also an irregular transverse fascia in front of the middle; apical half pallid ashen like the thorax; striation fine but distinct. Pygidium and ventral plates densely clothed with pallid ashen pile; hind coxæ black, the breast white. Hind femora with a long, slender tooth, and behind it and quite separated from it a much shorter tooth emarginate or bifid at the summit. Hind tibiæ short, strongly curvate at base, stout, with rather short apical spur; basal joint of hind tarsus stout.

This is another of the species forming a transition from the "*Pachymeri*" to the Stirps I of "Bruchi genuini." The penultimate ventral plates though not so abbreviate as in most of the *Pachymeri* are still of the same type. A single exponent was found in each locality.

23. **Bruchus ruficoxis.**

Perparvus, subtus niger (abdomine feminæ ex parte rufo), supra rufus (sed colore instabilis) fusco nigroque variegatus, pedibus cum coxis antennarumque basi pallide rufis; prothorace conico; antennis parum elongatis, intus subserratis; femoribus posterioribus dente minuto denticulisque minutissimis duobus instructis.

Long. $1\frac{1}{2}$ millim.

Hab. GUATEMALA, San Gerónimo (*Champion*); NICARAGUA (*Sallé*).

Head very short, eyes very widely separated. Antennæ reaching nearly as far back as the base of the thorax; third and fourth joints rather small, subequal, fifth and following joints infuscate or nearly black, penultimate joints not quite so long as broad. Thorax with a distinct coarse punctuation, and clothed with a very pallid ochreous pubescence. Elytra finely striate, of a pallid red colour, more or less marked with black or fuscous along the suture and outer margin, their pubescence similar to that of the thorax. Hind femora bearing only a quite small tooth and two minute acute denticles quite near to it; tibiæ with a delicate rather long spur. The male has the hind body entirely black and the pygidium more inflexed at the apex, so that the apical ventral plate is very short in the middle; in the female the four terminal ventral rings and the pygidium are red, and the last ventral ring, though quite short, is not any shorter in the middle. In each sex the three last ventral rings are quite short, but are a little shorter in the male than they are in the female.

The small size of the femoral teeth is one of the more important of the diagnostic characters of this species, which, perhaps, would be better placed among the small insects forming my Group § 6.

So far as I can judge from the small series of eight examples, the coloration of the under surface is pretty constant in each sex; the upper surface, however, varies a good deal in colour, and the thorax, which is usually rufescent, may be black. From Nicaragua only one example has been obtained.

24. **Bruchus difficilis.**

Parvus, niger, pallide ochraceo-vestitus; antennarum basi, pedibus elytrisque rufis, his sutura margineque exteriore nigro-signatis; prothorace conico; antennis parum elongatis, intus subserratis; femoribus posterioribus dente parvo denticulisque tribus armatis.
Long. 2 millim.

Hab. GUATEMALA, San Gerónimo (*Champion*).

This species is extremely similar to the larger and darker individuals of *B. ruficoxis*, but differs as follows: it is of superior size, with less abbreviate ventral rings, dark coxæ, and a rather larger tooth followed by three denticles on the hind femora. The male has the antennæ evidently longer than they are in the female, with a very much larger fourth joint. The spur of the hind tibia is of moderate length and slender, similar to that of *B. ruficoxis*. Only three examples are before me.

25. **Bruchus argutus.**

Parvus, niger, ochraceo-vestitus; elytris rufis, sutura margineque exteriore argute nigro-maculatis; antennis pedibusque testaceis, femoribus posterioribus nigris; prothorace conico; antennis brevibus; femoribus posterioribus dente parvo denticulisque duobus instructis; tibiis posterioribus apice longius calcarato.
Long. $2\frac{1}{2}$ millim.

Hab. MEXICO, Jalapa (*Höge*); GUATEMALA, San Gerónimo, Dueñas, Chiacam, Zapote (*Champion*).

This species is excessively similar to *B. ruficoxis* and *B. difficilis*, but is undoubtedly distinct; compared with the former it is found to be larger, with the hind femora and the coxæ dark, the armature of the femora less minute, and a much longer spur on the hind tibia; this last character is diagnostic of this species amongst the immediate allies. The antennæ are quite short, with the penultimate joints evidently transverse and the fourth joint not larger than the third. Four typical examples have been received, and if, as I presume, from a minute difference in the ventral rings, I have both sexes before me, then the sexual characters are very slight. The ventral rings are less abbreviate than they are in *B. ruficoxis*.

The examples from Jalapa, Zapote, and Dueñas are in each case unique, and are referred to this species because I see no good structural characters to separate them, but it is quite possible they represent three other very closely allied species.

26. **Bruchus argillaceus.**

Parvus, niger, minus tenuiter ochraceo-vestitus; pedibus rufis, pygidio rufescente; antennis fusco-rufis, basi dilutiore, articulo tertio quam secundus conspicue longiore; prothorace conico; elytris interdum basin versus rufo-signatis; femoribus posterioribus dente gracili denticulisque duobus instructis.
Long. $2\frac{1}{2}$ millim.

Hab. GUATEMALA, Dueñas, Capetillo (*Champion*).

This is an obscure insect allied to *B. obsoletus*, Say, but smaller, with the pubescence

of the surface uniform, and the second joint of the antennæ smaller, so that there is a conspicuous difference between it and the third joint. The mucro at the extremity of the hind tibia is very short, as in *B. obsoletus*. It is equally similar to *B. difficilis*, but that species has the third joint of the antennæ small, and three distinct denticles on the hind femur. Only four very fragmentary examples are before me, but from these it is clear that the colour of the surface is variable; when there is a vitta of red colour on the elytra the resemblance to *B. difficilis* is considerably increased. I am not able to detect any sexual characters.

27. **Bruchus pruininus.**

? *Bruchus pruininus*, Horn, Trans. Am. Ent. Soc. iv. (1873), p. 327 [1].

Hab. North America, Arizona [1].—Mexico, Guanajuato (*Sallé*).

I refer a single mutilated example to this species with some doubt. It presents no salient points of distinction when compared with Horn's description [1], except that it is apparently less densely clothed with pubescence. It is exactly similar in appearance to *B. vexatus*, but the thorax is shorter, the two basal spots are not present on it, the hind femur bears two denticles in addition to the tooth, and there is apparently no mucro to the tibia. This last point is not quite clear, as the hind legs are much mutilated.

28. **Bruchus vexatus.**

Niger, tenuiter albido-vestitus; prothorace basi utrinque scutelloque albo-maculatis, antennarum basi tibiisque anterioribus fuscis; prothorace conico, fortiter punctato; femoribus posterioribus dente lato armatis.
Long. $2\frac{1}{3}$ millim.

Hab. Mexico, Toxpam (*Sallé*).

Head short and broad, eyes widely separated. Antennæ short, the basal joints infuscate yellow; third joint a good deal longer than the second or the fourth, penultimate joints strongly transverse. Thorax rather elongate, very coarsely punctate, clothed sparingly with white pubescence, which is concentrated at the base on each side to form a small spot; scutellum densely clothed with white pubescence. Elytra rather elongate, somewhat deeply striate; black, sparingly but uniformly clothed with very fine white pubescence; interstices not sculptured. Under surface rather more closely and less uniformly clothed with white pubescence; hind coxæ quite bare. Pygidium rather small. Hind femora short, somewhat incrassate, armed with a single rather large tooth; tibia short and stout, slightly curved at the base, armed at the extremity with a rather short mucro.

29. **Bruchus pertinax.**

Niger, griseo-vestitus, supra variegatus; antennarum basi tibiisque anterioribus testaceis; antennis brevibus, sat

latis; prothorace conico, fortius punctato; femoribus posterioribus dente gracili denticulisque duobus armatis.

Long. $2\frac{1}{4}$ millim.

Hab. MEXICO, Guanajuato (*Sallé*).

Four basal joints of the antennæ sordid yellow; fourth small, the penultimate joints rather strongly transverse. Thorax much narrowed from the base to the front, and only slightly rounded near the front angles; very coarsely punctate, the punctuation visible notwithstanding the variegate pubescence; this is of a grey colour, denser about the sides on the basal lobe, and a very narrow line along the middle. Elytra variegate with two shades of grey leaving black spots, the most conspicuous of which is a very large one on each side. Pygidium grey; under surface pallid grey, the pubescence condensed on the pleuræ, so that this part of the sides is white. Hind tibia armed with a long, slender mucro.

This is very similar to *B. pullatus* in Group § 6, but the unique example is twice the size of any individual I have seen of that species, and has a more conical thorax.

30. **Bruchus ornatus.**

Supra pallide rufus, densius pallide griseo-vestitus, fusco-maculatus; subtus niger, abdominis apice rufo; antennis brevibus pedibusque testaceis; femoribus posterioribus nigro-plagiatis, dente gracili denticulisque duobus armatis.

Long. $2\frac{1}{3}$ millim.

Hab. MEXICO, Guanajuato (*Sallé*).

Antennæ short and stout, pale yellow. Thorax densely clothed with pallid subvariegate pubescence which is thickest and more pallid in front of the scutellum. Elytra marked with numerous small dark spots, and with a pubescence of a griseous and ochraceous colour. The hind tibia is without mucro at the extremity, there being only a slight prolongation of the anterior angle.

Although the legs differ little from those of *B. argillaceus*, yet the broader and shorter pallid antennæ and the coloration are so different that I cannot place this as a variety of *B. argillaceus*. A single example is all that is known. In coloration it resembles *B. debilicornis* of Group § 1. § 3

One example only.

31. **Bruchus limbatus.**

Bruchus limbatus, Horn, Trans. Am. Ent. Soc. iv. (1873), p. 326 [1].

Hab. NORTH AMERICA, Lower California [1].—MEXICO, Sonora [1].

I have not seen this species, but have little doubt that it will prove to be allied to *B. argillaceus*. An example from Arizona sent by the late Mr. Morrison as being

Horn's *B. limbatus*, and supposed to have been examined by Horn, does not agree with the description, and is probably uncharacterized, though it may prove to be an extremely large variety of *B. ruficoxis*.

32. **Bruchus placidus.**

Bruchus placidus, Horn, Trans. Am. Ent. Soc. iv. (1873), p. 341 [1].

Hab. North America, Arizona [1], Texas [1].—Mexico, Northern Sonora (*Morrison*).

33. **Bruchus serenus.**

Rufus, ochraceo-vestitus, haud maculatus; antennis haud elongatis, extrorsum fuscescentibus; femoribus posterioribus dente gracili denticulisque duobus instructis.

Long. $2\frac{1}{2}$ millim.

Hab. Guatemala, San Joaquin in Vera Paz (*Champion*).

Another species represented by a single example, very similar to *B. placidus*, but with a rather long apical spur to the hind tibia, this latter only very slightly curvate at the base, and the femora not so dilated; the antennæ, too, are longer; the under surface is entirely red, the breast not being black in the middle, as it is in *B. placidus*. The head, like the rest of the surface, is red, rather longer in front than it is in the allied species; the antennæ are stout, a little serrate internally, with the penultimate joints strongly transverse, the terminal joint rather paler than those preceding it. The upper surface has no appearance of maculation either of the ground-colour or pubescence.

34. **Bruchus submuticus.**

Parvus, rufus, ochraceo-vestitus, vix submaculatus; sutura angustissime nigra, pectore medio nigricante; antennis brevibus, testaceis; femoribus posterioribus dente minuto denticulisque tribus minutissimis armatis.

Long. $2\frac{1}{4}$ millim.

Hab. Mexico, Northern Sonora (*Morrison*).

This insect is very similar to *B. placidus*, and, like it, has the surface of a nearly uniform dilute red colour. *B. submuticus* is, however, smaller, and is entirely distinct by the extreme minuteness of the armature of the hind femora, in which respect it rather resembles *B. ruficoxis*. The upper surface of the head is black; the third joint of the antennæ only slightly longer than the second, the penultimate joints strongly transverse. The thorax is transversely conical; the spur of the hind tibia slender and moderately long, rather longer and more slender than that of *B. placidus*. In the male the last ventral ring is deeply emarginate in the middle, in the female only very slightly.

The series of twelve examples we have received exhibit very little variation, except that the pubescence in very fresh examples is white, especially beneath, and the faint maculation of the elytra is in these examples more distinct.

35. **Bruchus limpidus.**

Parvus, rufus, ochraceo-vestitus, vix submaculatus; antennis brevibus, latis, testaceis; pectore medio nigricante; femoribus posterioribus dente acuto denticulisque duobus armatis.
Long. $2\frac{1}{2}$ millim.

Hab. GUATEMALA, near the city, Capetillo, Zapote, Dueñas (*Champion*).

This species is extremely similar to *B. placidus*, but the examples are smaller, and have only two denticles on the hind femur, and the apical spur of the hind tibia is quite short. The dark colour on the under surface spreads to a greater or less extent over the ventral rings. The structure of the hind legs readily distinguishes the species from *B. submuticus*, to which, in respect of form, size, and colour, it is extremely similar. The South-American *B. paleatus*, Jekel, is probably another closely allied species, but the details of structure of the hind legs are not given in the description of the French author; and it may be presumed that the two are different. In the male of *B. limpidus* the terminal ventral ring is excised in the middle almost as far as the margin of the preceding ring.

We have received a series of sixteen examples of the species.

36. **Bruchus solitarius.**

Niger, supra fusco-rufus, ochraceo-vestitus, submaculatus; antennis brevibus, latis, pedibusque testaceis; femoribus posterioribus dente elongato denticuloque prominulo armatis.
Long. $2\frac{3}{4}$ millim.

Hab. GUATEMALA, near the city, Zapote (*Champion*).

Although we have only a single typical example of this species, and it is undoubtedly very close to *B. limpidus*, yet it appears to me to be probably distinct, as it is rather broader and of darker colour, with more elongate tooth on the hind femur, and the two smaller teeth replaced by a single prominent one. The spur of the hind tibia is reduced to a mere angular prominence. The pygidium is densely clothed with ochraceous pubescence.

A second example, in very fragmentary condition, found near the city of Guatemala, is not larger than *B. limpidus*, and has the sides of the elytra broadly marked with dark colour; as the armature of the legs agrees, it is at present presumed, and I think may really prove, to be the same species. It should be remarked that the denticle of the femur in *B. solitarius* is a little emarginate at the apex, giving somewhat the appearance of being formed of two denticles crowded together.

37. **Bruchus elevatus.**

Brevis, convexus, niger; subtus pallide griseo-vestitus; prothorace utrinque ochraceo-vestito; elytris tenuiter vestitis, vix perspicue maculatis; antennis brevibus, crassis, basi pedibusque fusco-rufis; femoribus posterioribus dente mediocri denticulisque duobus minutis instructis.
Long. $2\frac{3}{4}$ millim.

Hab. GUATEMALA, Cahabon (*Champion*); PANAMA, Bugaba (*Champion*).

About the size of *B. placidus*, but shorter and more convex, and distinguishable by the scanty clothing of the elytra, which consists of nearly white pubescence, forming very slender, extremely indistinct, white longitudinal lines on the black ground, and between these lines two transverse series of equally faint white flecks across the middle. The second, third, and fourth joints of the antennæ differ but little in their lengths, and the penultimate joints are strongly transverse. The hind tibiæ are armed at the extremity with a rather short spur, not quite so long as the width of the apex of the tibia. Only one example was met with in each locality. The black ground-colour in this insect is feebly diluted with red, and this slight reddening is more conspicuous in the example from Guatemala than in the Bugaba exponent.

38. **Bruchus crassulus.**

Brevis, convexus, niger, subtus pallide griseo-vestitus, supra pallide subvariegatus; antennis brevibus, crassis, testaceis, medio fuscis; tibiis quatuor anterioribus testaceis; femoribus posterioribus dente parum elongato armatis.

Long. 3 millim.

Hab. PANAMA, Volcan de Chiriqui, 2500 to 4000 feet (*Champion*).

This species is readily distinguished by the single tooth of the femur, there being on its hind margin only a faint indication of one additional denticle; the femur is not much dilated, and the thick tibia is scarcely at all curved, and there is a short but quite definite mucro at its extremity. So far as I can judge by a single individual, there is no distinct pattern on the upper surface, which, however, is much flecked in an irregular manner with white, and the black ground-colour is indefinitely spotted with red. The antennæ are coloured in a similar manner to those of *B. obsoletus*, but are considerably shorter; the general shape is shorter and more convex than in *B. obsoletus*, and the pygidium is longer and narrower.

39. **Bruchus vacillator.**

Niger, hic inde tenuiter griseo-maculatus; antennis pedibusque anterioribus et intermediis testaceis, illis brevibus et latis, articulis penultimis fuscis; femoribus posterioribus dente elongato denticulisque duobus instructis.

Long. 4 millim.

Hab. MEXICO, Guanajuato (*Sallé*).

This is another species represented only by a single example. It has much the appearance of *B. incensus* and *B. pictifemur*, but is distinguished from them by the form of the thorax, which is not so elongate and has not concavely-arcuate sides. The head is very short, the eyes widely separate, the vertex not carinate. The thorax is rather short, much narrowed to the front, coarsely punctate, minutely speckled with ochreous pubescence, on the middle with two distant, very minute, white specks. Elytra rather elongate, finely striate, minutely speckled with ochraceous and pallid grey.

Pygidium rather densely clothed with ochraceous pubescence. Under surface nearly black, very little variegate. Hind femora a good deal incrassate; tibiæ but little curved, armed at the apex with a very short mucro.

40. **Bruchus puellus.**

Subtus niger, griseo-vestitus; supra fuscus, griseo-variegatus; antennarum basi pedibusque testaceis; femoribus posterioribus dente gracili denticulisque duobus armatis, tibiis mucrone elongato.
Long. $2\frac{1}{2}$ millim.

Hab. PANAMA, Volcan de Chiriqui below 4000 feet, Bugaba, Los Remedios (*Champion*).

Antennæ rather short and slender, the four basal joints yellow, the others dark; second, third, and fourth joints subequal in length, penultimate joint slightly transverse. Elytra of a tawny colour differing little from that of the rest of the upper surface, but submaculate with patches of more pallid pubescence, and also with a few oblong patches of a darker tawny or fuscous colour.

This species cannot be treated as a small variety of *B. obsoletus* on account of the elongate mucro of the hind tibia. Its structural characters are almost the same as those of *B. argutus*, but the very different coloration leaves little doubt the two are distinct. Four examples are referred by me to this species; one of the two from the Volcan de Chiriqui is of broader form, with shorter, entirely testaceous, antennæ.

41. **Bruchus obsoletus.**

Bruchus obsoletus, Say, Descr. Curc. of N. Am. p. 2 [1]; Horn, Trans. Am. Ent. Soc. iv. (1873), p. 337 [2].
Bruchus obtectus, Say, op. cit. p. 1 [3]; Jekel, Ins. Saunders. p. 15 [4].
Bruchus pallidipes, Fåhr. in Schönh. Curc. v. p. 91 [5]; Schaufuss, Stett. ent. Zeit. 1861, p. 324 [6].
Bruchus fabæ, Riley, Ann. Rep. Ins. Miss. 1871, p. 52 [7].

Hab. NORTH AMERICA [1 3 7], east of the Rocky Mountains [2].—MEXICO, Juquila, Toxpam, Guanajuato, San Andres Tuxtla (*Sallé*), Jalapa (*Höge*); GUATEMALA, near the city, San Gerónimo, Capetillo, Zapote, Chiacam, Senahu, Cahabon (*Champion*), Chinautla 4100 feet (*Salvin*); NICARAGUA, Chontales (*Janson*).—ANTILLES [5]; SOUTH AMERICA to Buenos Ayres [4].—EUROPE [6].

This insect is said to be very abundant and destructive in the United States [1 7], but not to be very variable. I have no evidence of its being abundant in our region, but it exhibits considerable variation therein. The synonym of *B. pallidipes* is given on the authority of Jekel [4], and it is quite probable that some of the other descriptions in Schönherr's work (*B. tetricus* and *B. ventralis*, e. g.) may prove to refer to the same species. I have adopted the name used by Horn, though *B. obtectus*, of the same date, is better known in Europe. In the Munich Catalogue *B. obtectus* is said to be the same as *B. mimosæ*, Fabr. & Oliv., but this appears to me excessively doubtful.

42. **Bruchus mexicanus.**

Niger, pallide griseo-vestitus, supra rufo griseoque variegatus; antennis brevibus pedibusque testaceis; femoribus posterioribus dente parum elongato denticulisque tribus instructis.
Long. $2\frac{1}{2}$ millim.

Hab. Mexico, Guanajuato (*Sallé*).

Antennæ short and stout, entirely pale yellow, third joint only slightly longer than the second or the fourth. Head very short. Thorax densely clothed with a variegate pubescence of fuscous grey and pallid grey or white. Elytra reddish, marked with fuscous, especially at the sides, and much covered with pallid pubescence. Legs pale red, coxæ black. Hind femur with a slender, not very long, tooth, and with three conspicuous denticles close to the tooth, forming, in fact, a prolongation of its hind margin, the tooth not much more prominent than the first of the denticles; the tibia is short, but little curvate, furnished at the apex with only a slight prolongation of its anterior angle, not long enough to be called a mucro. In the female the last ventral ring is twice as long as that preceding it, while in the male it is only of the same length.

Seven examples.

43. **Bruchus ingæ.**

Bruchus ingæ, Fåhr. in Schönh. Curc. v. p. 27 [1].

Hab. Mexico[1] (in seminibus Ingæ).

We have not received anything agreeing with this description; the species may possibly be an ally of *B. placidus*. In Sallé's collection *B. sallæi* was identified as this species, but, I think, erroneously.

§ 3. *Thorax conic, its sides not concavely arcuate; antennæ rather elongate, serrate internally; hind femora moderately incrassate, armed with a tooth and two or more denticles.*

The character connecting the species of this group is the rather long, serrate antennæ. The facies is that of our European *B. canus*. Species 44 to 48 are dark in colour, species 49 and 50 pallid.

44. **Bruchus ptinoides.**

Niger, opacus; pedum apicibus flavis, corpore subtus tenuiter albido-vestito, supra tenuissime albido-fasciato; antennis sat elongatis, intus subserratis; prothorace conico, inæquali; elytris post basin transversim depressis; femoribus posterioribus dente sat elongato denticulisque minutis quinque instructis.
Long. $2\frac{1}{2}$ millim. (capite deflexo).

Hab. Guatemala, Aceituno, San Gerónimo (*Champion*).

Antennæ black, with the second joint minute and yellow beneath; third joint quite

as long as the fourth and more slender, the fifth to the tenth each about as long as broad. Eyes very deeply emarginate, little separated; vertex carinate. Thorax very narrow in front; its surface uneven in consequence of a transverse depression in front of the middle, and a slight convexity of the basal portion, very densely and indistinctly, though not very finely, sculptured; very sparsely clothed on each side with white. Scutellum minute, white. Elytra finely but deeply striate just before the middle, with an irregular, very faint, milky-white band, and in front of this a depression. Pygidium only moderately large, very finely sculptured, and bearing a white, very delicate, clothing, not concealing the ground-colour. Front and middle tarsi and apices of the tibiæ yellow; hind tarsi yellow, with the basal joint black, except at its extremity. Femora moderately dilated; tibiæ arcuate at the base, unarmed at the extremity.

This is a very distinct species, but is undoubtedly allied to the following, *B. cyanipennis*. Both species have a similarity in form to the European *B. canus*, but the apical ventral rings are considerably shorter in the New-World species. Only three examples were found of *B. ptinoides*.

45. **Bruchus cyanipennis.** (Tab. XXVI. fig. 9.)

Niger, tenuiter griseo-pubescens; elytris cyaneis, tarsis anterioribus interdum fuscis; antennis sat elongatis, intus subserratis; prothorace conico, dense sculpturato, opaco; elytris minus subtiliter striatis; femoribus posterioribus dente sat elongato denticulisque quinque minutis armatis.

Long. $2\frac{1}{4}$–$2\frac{1}{2}$ millim. (capite deflexo).

Hab. GUATEMALA, Tamahu, San Juan, and La Tinta in Vera Paz (*Champion*); PANAMA, Volcan de Chiriqui below 4000 feet (*Champion*).

This species has greatly the aspect of the European *B. canus*, Germ., which, however, has unarmed tibiæ. It is closely allied to *B. ptinoides*, but differs not only by the even surface and the blue elytra, but also by the fact that the hind tibiæ are armed with a short spur. I presume that the front tarsi being obscurely flavescent is a mark of the male sex.

Eight examples were brought back from Guatemala and two from the Volcan de Chiriqui; the latter have the front and middle feet paler than they are in the males of the examples from Guatemala.

46. **Bruchus serraticulus.**

Angustulus, niger, tenuiter albido-vestitus, tibiis tarsisque anterioribus flavis; antennis gracilibus, intus subserratis; prothorace conico, densissime sculpturato, opaco; femoribus posterioribus denticulis minutis quatuor armatis.

Long. $1\frac{3}{4}$ millim. (capite deflexo).

Hab. MEXICO, Guanajuato (*Sallé*).

The antennæ in this species are formed much as in *B. ptinoides* (but are not so wide), the second joint being very small in proportion to the third; the eyes are very promi-

nent, almost contiguous, rather coarsely granulate; the vertex carinate. The striæ of the elytra, though very distinct and regular, are fine, and not punctate. The white pubescence on this insect is very minute and scanty, except on the parapleuræ and the scutellum, where it is more condensed.

Only a single example has been received of this species, which has the aspect of a minute *B. canus*, Germ., and would appear to be closely allied to *B. cyanipennis*, except that the larger tooth on the hind femur is absent; possibly this may be the result of accident, but I do not think such is the case. The hind tibiæ have no spur.

47. **Bruchus modestus.**

Niger, subtilissime albido-canescens; antennis (feminæ ?) intus subserratis, articulis secundo tertioque minutis, subtus testaceis; oculis sat magnis, minus approximatis; prothorace conico, densissime et subtilissime sculpturato, opaco; elytris subtiliter striatis; tibiis anterioribus flavis; femoribus posterioribus dente sat elongato denticulisque duobus armatis.

Long. 2 millim. (capite deflexo).

Hab. GUATEMALA, San Gerónimo (*Champion*).

Head with very short muzzle, eyes rather widely separated, vertex not carinate; legs rather slender, hind femora not much swollen.

Notwithstanding the great resemblance in colour, form, clothing, and sculpture between this species and *B. serraticulus*, the structural differences separate the two completely. Only one example of *B. modestus* has been met with; it is, I fancy, a female, and, if so, the male will probably have the antennæ more strongly serrate.

48. **Bruchus multisignatus.**

Niger, tenuiter albido-vestitus; antennarum basi, tibiis, tarsisque anterioribus, testaceis; elytris guttulis elongatis numerosis fascias transversas irregulares formantibus albidis; antennis maris elongatis, subpectinatis, feminæ sat elongatis, serratis; femoribus posterioribus dente elongato denticulisque duobus armatis.

Long. 3 millim.

Hab. GUATEMALA, San Gerónimo (*Champion*).

Antennæ with the three basal joints dull yellow; second joint small, the third elongate. Head with prominent, coarsely facetted eyes, which are but little separated in front; vertex carinate. Thorax regularly conical, black, lightly sprinkled with white pubescence, its sculpture rather coarse and distinct. Elytra black, with a small but conspicuous white mark on the suture behind the scutellum, and with numerous other white marks, forming two irregular bands across the middle; finely but distinctly striate, the striæ finely punctured. The hind femora are moderately dilated, the tibiæ armed with a rather long apical spur. Besides the difference in the antennæ of the sexes, the male appears to be rather larger than the female, and has the terminal ventral ring shorter in the middle.

Two males and one female have been procured. The species is allied to *B. cyani-*

pennis, though with numerous points of distinction, and, like that species, has the four apical ventral rings considerably shorter than they are in *B. canus*, Germ.

49. **Bruchus ophthalmicus.**

Testaceo-ferrugineus, supra dense ochraceo-vestitus, fusco-maculatus, subtus tenuiter griseo-vestitus, prosterno mesosternoque nigricantibus; antennis pedibusque pallide testaceis, illis elongatis, intus serratis; oculis magnis, fere contiguis; femoribus posterioribus dente minore denticulisque duobus instructis.
Long. $2\frac{1}{2}$ millim. (capite deflexo).

Hab. GUATEMALA, near the city, Aceituno, San Gerónimo (*Champion*).

Antennæ very pallid; second joint small, the third elongate, the terminal joints rather longer than broad. Eyes very large, with facets of moderate size, separated on the vertex only by the longitudinal carina. Thorax narrow in front, with acute hind angles, densely pubescent, scarcely variegate. Elytra very finely striate; densely clothed, the pale clothing more or less distinctly interrupted by fuscous marks, the largest and darkest of which are at the suture, behind the scutellum, and close to the extremity. The posterior femora are much dilated, and armed with a single small tooth, behind which are one or two extremely minute tubercles; the short, stout tibiæ are a good deal curved at the base and at the apex, they have no apical spur, but the acute angle is very slightly prolonged.

Although the pygidium is not so elongate or vertical as in most other of the *Pachymeri*, this species might be placed in Stirps II of Schönherr's Grex II. One example was obtained at San Gerónimo, and a second near the city of Guatemala; these I have no doubt are both males, and are described above. The specimen found at Aceituno is, I feel certain, the female of *B. ophthalmicus*, though it has the eyes very much smaller and more distant, and the antennæ less developed, being more slender and much shorter.

50. **Bruchus debilicornis.**

Ferrugineus, supra dense ochraceo-vestitus; elytris fusco albidoque variegatis, antennis pedibusque pallide testaceis; subtus tenuiter griseo-vestitus, prosterno pectoreque nigricantibus; antennis elongatis, gracilibus, intus subserratis; oculis magnis, parum distantibus; femoribus posterioribus dente minore denticulisque duobus armatis.
Long. 2 millim.

Hab. GUATEMALA, Capetillo (*Champion*).

This is closely allied to *B. ophthalmicus*, but, compared with the male of that species, is smaller, has the antennæ more slender, the eyes not quite so approximate, the maculation of the upper surface greater; the tubercles at the extremity of the hind femur are also more prominent so as to form two minute teeth. Only one example has been found; I have no doubt it is a male.

51. **Bruchus clandestinus.**

Pachymerus (?) *clandestinus*, Motsch. Bull. Mosc. 1873, 2, p. 246[1].

Hab. Panama, Aspinwall[1].

We have not received anything agreeing with this description, and the position of the species is quite doubtful; but I place it here, as the antennæ are said to be "valde serratis." It is recorded as found on the 2nd of March in the seeds of an ashy-yellow leguminous plant growing on the sea-shore.

§ 4. *Form short and broad, with large, broad, subperpendicular pygidium; front coxæ frequently minutely separated at the tip by a minute prosternal lamina; antennæ short, only subserrate; hind femora but little incrassate, usually armed with a single tooth, rarely unarmed, or with one or two additional denticles.*

The character of the separated anterior coxæ is of importance, as it is an approximation to what exists in the neighbouring genera *Spermophagus* and *Caryoborus*; it is unfortunately only very minute, and grades away so as to be quite absent in several species.

52. **Bruchus obscuriceps.**

Convexus, fusco-rufus, fusco griseoque vestitus; capite brevi, lato, oculis distantibus; prothorace transversim conico; pygidio elongato, obliquiter perpendiculari; antennis pedibusque anterioribus testaceis (illis interdum extrorsum nigris); femoribus posterioribus dente gracili denticulisque duobus armatis; coxis anterioribus a processu gracili bene separatis.
Long. $4\frac{1}{2}$ millim.

Hab. Mexico, Vera Cruz (*Sallé*).

Antennæ short, the four basal joints slender, the others broad, the seventh to the tenth transverse; third joint a good deal longer than the second. Head broad, extremely short, the vertex obscurely elevate along the middle; eyes but little prominent, finely facetted. Thorax transverse, but narrow in front, and becoming gradually much broader behind; closely covered with a pallid grey pile that much conceals the sculpture, which consists of a minute, very dense, punctuation and more scattered larger punctures. Elytra rather finely striate, with patches of pallid fuscous and grey pubescence, scarcely causing a maculation. Pygidium very long, densely clothed with pallid grey pubescence, as also are the under surface and the hind femora; these latter are a good deal dilated, and bear a rather long tooth and two other smaller, but very distinct teeth near it; the tibiæ are stout, very little curved, with a quite short apical spur. Last ventral segment elongate in the middle.

Four examples.

53. **Bruchus brevicornis.**

Sat convexus, fusco-ferrugineus, fusco griseoque minus dense vestitus vix variegatus; prothorace conico, crebre fortiter punctato; pygidio elongato, oblique perpendiculari; antennis pedibusque anterioribus testaceis

(illis interdum extrorsum nigris); femoribus posterioribus dente gracili denticulisque duobus armatis; coxis anterioribus a processu gracili separatis.

Long. 4 millim.

Hab. British Honduras, Belize (*Blancaneaux*).

Although closely allied to *B. obscuriceps*, this species is undoubtedly quite distinct, being smaller and not quite so convex, with more scanty and less pallid clothing, with less transverse thorax, the punctuation of which is coarser, and with the laminæ separating the front coxæ more slender. Of the three examples found, one is a male, and has the apical ventral ring not quite so elongate in the middle as it is in the female.

Three examples.

54. **Bruchus muricatus.**

Fusco-rufus, abdomine rufo, antennis pedibusque testaceis; pube griseo-flavescente minus dense vestitus; prothorace conico, fortiter denseque punctato; elytris brevibus, ad basin muricatis; pygidio valde elongato; femoribus posterioribus dente elongato armatis.

Long. $5\frac{1}{4}$ millim.

Hab. Panama, Bugaba (*Champion*).

Antennæ short, the penultimate joints transverse. Eyes very little prominent, finely facetted, very widely separated. Thorax regularly narrowed from the base to the front, with unusually coarse sculpture. Elytra rather deeply striate, each of the striæ 3–6 terminated in front by a small angular elevation. Hind tibiæ with a long spur at the apex.

This species, with many points in common with *B. obscuriceps*, differs in very important characters, and will be readily recognized by the unusually coarse thoracic sculpture and the asperities at the base of the wing-cases; the front coxæ are separated by a lamina so fine that it can be only detected when looked at directly from behind. Only one pair was found of the species; the male has the intermediate ventral rings considerably shorter than they are in the female, and the apical ring greatly abbreviated in the middle owing to the inflection of the apex of the pygidium.

55. **Bruchus inanis.**

Brevis, latior, convexus, fusco-testaceus, supra fuscus, griseo-vestitus, in elytris submaculatus; antennis, pedibus abdomineque, testaceis; prothorace fortiter transversim conico; femoribus posterioribus dente parvo armatis.

Long. $3\frac{1}{2}$ millim.

Hab. Mexico, Toxpam (*Sallé*); British Honduras, Belize (*Blancaneaux*).

Antennæ short, the joints 6–10 transverse. Head small; eyes but little prominent, rather widely separated. Thorax strongly transverse, greatly narrowed towards the front, the surface rather closely clothed with griseous pubescence, which is not distinctly spotted, and with rather numerous coarse punctures. Elytra short, very finely striate, clothed with griseous pubescence, allowing two transverse series of

indefinite fuscous spots to be perceived. Hind tibia with acute and slightly prolonged inferior angle, not long enough to be termed a spur.

This species is no doubt allied to *B. obscuriceps*, though it has a shorter thorax; the front coxæ are actually contiguous at the tip, nevertheless there is a very slender lamina concealed by their apices, and this projects beyond the coxæ as an excessively minute process.

Only two examples of uncertain sex were found by M. Blancaneaux; the ground-colour in one is more rufescent than it is in the other. The Mexican example is a pinned individual in bad preservation, but appears to be really the same species. It was labelled in Sallé's collection "*B. minutus*, Fabr.," but it is clear that this species is not the *B. minutus* of either Fabricius or Schönherr; further on (no. 107) I have recorded another species that is apparently less unlikely to prove to be the Fabrician insect.

56. **Bruchus guttifer.**

Brevis, convexus, subtus dense pallido-griseo vestitus, supra tenuiter vestitus, rufescens; in elytris guttulis minimis pallidis transversim positis; prothorace transversim conico; femoribus posterioribus dente parvo armatis.

Long. 3 millim.

Hab. MEXICO, Jalapa (*Höge*), Vera Cruz (*Sallé*); GUATEMALA, Dueñas, Capetillo (*Champion*).

Antennæ short, the basal joints yellow, the external ones infuscate; the sixth to the tenth joints strongly transverse. Thorax rather strongly transverse, but regularly conical, the sides being gradually narrowed from the base to the front, and not at all rounded in front, dark red, coarsely punctate, and only very sparingly clothed. Elytra very finely striated, dull red, with six very minute white dots arranged in an irregular transverse series across the middle. Under-surface and pygidium densely clothed with pallid griseous pubescence.

The structural characters are similar to those of *B. inanis*, except that the angle of the hind tibia possesses a short, slender spur.

I have seen four Mexican exponents of this species, and two from Guatemala; the one found at Capetillo is a variety in which the thorax and elytra are fuscous instead of rufescent.

57. **Bruchus alticola.** (Tab. XXVI. fig. 10.)

Niger, aureo-vestitus; elytris, antennis, pedibus abdominisque lateribus et apice, rufis; antennis brevibus, latis; femoribus posterioribus dente parum prominulo instructis.

Long. $3\frac{1}{3}$ millim.

Var. Elytris basi apiceque fuscescentibus.

Hab. GUATEMALA, Quiche Mountains 7000 to 9000 feet (*Champion*).

Antennæ pale; fifth joint hardly so long as broad, the penultimate joints strongly

transverse. Head very short; eyes very widely separated. Thorax short, strongly narrowed in front, coarsely punctate, the sculpture concealed by the yellow, unicolorous pubescence. Elytra rather elongate, finely striate, the interstices impunctate. Pygidium red. Under surface black, except the sides and extremity of the hind body. Legs entirely red. Hind femora slender, with only a small tooth; tibiæ without mucro.

Four examples of the form with unicolorous elytra were met with, and a similar number of the variety with the base and apex of the wing-cases darker, causing a faint broad fascia across the middle. The last ventral plate is rather elongate, but in the male is a little shorter in the middle owing to the greater inflection of the extremity of the pygidium. This is the only sexual character I can observe. The femora are not canaliculate. The fasciate variety is represented on our Plate.

58. **Bruchus laminifer.**

Subovalis, sat convexus, niger, tenuiter pruinosus, subnitidus, antennarum basi pedibusque rufis; prothorace parum elongato, antrorsum fortiter angustato, lateribus parum rotundatis, dense punctulato; elytrorum interstitiis dense punctulatis; femoribus posterioribus dente sat elongato instructis.

Long. $3\frac{3}{4}$ millim.

Hab. GUATEMALA, Mirandilla 1700 feet (*Champion*).

Antennæ short, very stout; five basal joints yellow, the others dark; penultimate joints very strongly transverse. Head rather narrow; eyes widely separated. Thorax and elytra sparingly and equally covered with a very fine white pubescence, which leaves the surface somewhat shining; they are densely and finely punctulate, the latter with the moderately fine striæ very distinctly punctate. Pygidium rather large and broad, the white pubescence on it and the under-surface more dense. Legs entirely bright red, the hind femora armed with a moderately long tooth; the tibiæ straight, armed at the apex with conspicuous digitations, of which the anterior is not longer than the others. Front coxæ separated by a distinct lamina. In the female the last ventral ring is slightly longer than the penultimate; in the male it is shorter in the middle, and in this sex the maxillary palpi are unusually elongate and slender. The femora are not canaliculate.

Two pairs were found. In one example the surface is fuscous instead of black, probably connected with immaturity of the specimen.

59. **Bruchus instabilis.**

Brevis, niger, ochraceo vestitus; antennis pedibusque rufis, elytris vel rufis, vel nigris, vel rufo-maculatis; prothorace transversim conico, fortiter punctato; elytris minus tenuiter striatis, striis punctatis, interstitiis subtiliter alutaceis; pygidio magno convexo; femoribus posterioribus dente parum prominulo instructis.

Long. $2\frac{3}{4}$ millim.

Hab. MEXICO, Toxpam, Teapa (*Sallé*), Paso del Macho (*Höge*); GUATEMALA, near the city, Chiacam, San Gerónimo, Capetillo (*Champion*); HONDURAS (*Sallé*).

Thorax much narrowed in front where the sides are not rounded, quite dull, the

punctuation coarser than usual. Elytra short, the interstices not punctulate, but covered with a minute roughening or scratching. Pygidium and hind body closely covered with ochraceous pubescence. Hind femora not dilated, bearing only a single small tooth; tibia not arcuate, its front angle forming a very short mucro, which, however, is conspicuously longer than the other terminal digitations. The femora are not canaliculate, and the sexual distinctions are apparently very slight.

This species is very variable in the colour of the elytra, which may be entirely bright red or entirely black, the greater number of examples being intermediate, having a red patch of variable size on each wing-case; in these maculate examples the spot of red colour is always nearer the base than the apex. Examples with entirely red elytra were labelled *B. gilvipennis*, Deyr., in Sallé's collection; but as the name is only applicable to a minority of the specimens, I have not adopted it.

60. **Bruchus morosus.**

Sat latus, niger, subtus griseo vestitus; elytris ante medium fascia parum conspicua grisescente, antennarum basi pedibusque rufis; femoribus posterioribus basi nigra, dente lato minus elongato instructis.

Long. $2\frac{1}{2}$ millim.

Hab. Mexico, Jalapa (*Höge*); Guatemala, Sabo and Purula in Vera Paz (*Champion*).

Head rather narrow, with small eyes. Antennæ short, very broad, four or five basal joints yellow; second joint quite small, the third and fourth subequal, rather small. Thorax transverse-conic, much narrowed in front where the sides are a little rounded; very densely and rather coarsely punctate, somewhat sparingly clothed with griseous pubescence, of which there is a more distinct line in front of the scutellum, and a very small spot on either side of the middle. Scutellum densely clothed with nearly white pubescence. Elytra rather short, somewhat finely striate, black, with a faint irregular fascia of griseous pubescence in front of the middle. Pygidium rather large, densely clothed with griseous pubescence. Hind femora not dilated and not canaliculate, their single tooth short and broad; tibia moderately stout, not curvate, without mucro, but with distinctly prominent angle.

Nine examples were found at Sabo, and one at Purula; the description is made from the Sabo examples. The three Mexican individuals do not differ materially.

61. **Bruchus usticolor.**

Brevis, sat convexus, niger; supra fusco-, subtus ochraceo-pubescens; antennarum basi pedibusque testaceis, pedibus posterioribus rufis, femorum basi late nigra; prothorace transverso, lateribus rotundatis, densissime punctato; pygidio perpendiculari, basi dense pubescente ibidemque subtrimaculato; femoribus posterioribus dente gracili instructis.

Long. $2\frac{1}{4}$ millim.

Hab. Mexico, Jalapa (*Höge*).

Antennæ moderately stout, the penultimate joint about as long as broad. Head short

and broad; eyes widely separated. Upper surface rather densely covered with a fuscous pubescence. Scutellum with pallid pubescence. Thoracic punctuation fine and excessively dense. Pygidium densely clothed with ochraceous pubescence at the base, where it is arranged in three indefinite, connected patches. Hind femora feebly dilated, provided on the inner side near the extremity with a slender, rather long tooth, and on the outer side in the corresponding spot with a rather deep emargination; tibia straight, short, with definite, though rather short, apical mucro. There is no lamina to separate the apex of the front coxæ.

The only example found is no doubt a male; the terminal ventral ring is very short, in the middle still shorter.

This species resembles *B. morosus*, though not very closely allied thereto.

62. **Bruchus militaris.** (Tab. XXVI. fig. 11.)

Brevis, convexus, niger, subtus et in pygidio albido vestitus, supra subnudus, nitidus; elytris macula magna humerali rufa, pygidio basi rufescente; antennis geniculisque fusco-testaceis; femoribus posterioribus dente acuto instructis.

Long. 4–4½ millim., exc. capitis.

Hab. Mexico, Cerro de Plumas (*Höge*); British Honduras, R. Sarstoon (*Blancaneaux*).

Antennæ short and stout, fusco-testaceous, with the basal joints brighter; joints two, three, and four rather small, subequal; penultimate joints strongly transverse. Head not broad; eyes widely separated. Thorax greatly narrowed in front, the sides not rounded, the disc convex, the basal lobe broadly impressed; the surface shining, rather coarsely but not densely punctate, about the sides with fine, not dense, white pubescence. Elytra short and broad, deeply striate, the striæ punctate, the interstices rough, but not punctate, the pubescence fine and scanty; each with a large bright red spot, quite at the shoulder, reaching the base and outer margin, but not the suture. Pygidium very large, rufescent at the base, black at the apex, but the ground-colour concealed by the dense fine white clothing; this is somewhat denuded on two spaces below the middle, giving rise to the appearance of two black spots. Hind femora not slender, but not dilated, armed with a tooth very acute, though broad at the base, and with no appearance of denticles; tibia straight, rather stout, not mucronate, but with the anterior of the terminal angles perceptibly longer than the others. Terminal ventral ring short. The femora are not canaliculate, and the front coxæ are contiguous.

Of this very distinct species six examples were met with by Herr Höge, and one by M. Blancaneaux.

63. **Bruchus obesulus.**

Brevis, subrotundatus, minus convexus, niger, brevissime tenuiter pallido-griseo vestitus, elytro singulo macula maxima laterali rufa; antennarum basi tibiisque anterioribus fuscis; femoribus posterioribus dente mediocri acuto instructis.

Long. 3 millim.

Hab. GUATEMALA, near the city, Capetillo (*Champion*).

Antennæ only moderately long and broad; third and fourth joints slender, subequal, the penultimate joint about as long as broad. Head small; eyes scarcely at all prominent, widely separated. Thorax rather short, rounded at the sides so as to be much narrowed in front, black, very finely punctate, but with some larger, but still quite fine, punctures scattered over it, slightly shining, the surface receiving a somewhat leaden tint from the very minute pubescence; basal lobe foveolate in front of the scutellum. Elytra rather finely striate, each with a large red spot occupying the larger part of the surface, reaching the outer margin, but not the base, apex, or suture; interstices densely, minutely punctulate, the pubescence very minute. Pygidium broad, rather large, the pubescence very fine. Posterior femora not dilated, each with a rather slender acuminate tooth; tibiæ straight, only moderately broad, without mucro.

Only one example was met with in each locality; they represent the two sexes, the last ventral ring in the male being considerably excised. Although superficially similar to some of the maculate varieties of *B. instabilis*, this species is very distinct therefrom; the front coxæ are separated by a fine lamina, the hind femora not canaliculate.

64. **Bruchus trisignatus.**

Brevis, subrotundatus, minus convexus, niger, omnium brevissime pallido vestitus; elytro singulo macula magna humerali rufa; antennarum basi testacea; prothorace densissime punctulato; pygidio basi albido trimaculato; femoribus posterioribus dente singulo armatis.
Long. 3 millim.

Hab. PANAMA, Bugaba (*Champion*).

Head short and broad; eyes widely separated. Antennæ short and broad, the penultimate joints transverse. Thorax broad, rather short, greatly narrowed in front, the sides rounded; surface dull owing to a very dense minute punctuation, the basal lobe not impressed. Elytra each with a large humeral red spot occupying nearly half the surface, rather finely striate, the striæ punctured, the interstices densely punctulate. Pygidium broad, punctate, with three very conspicuous large spots of white pubescence at the base. Hind femora scarcely incrassate, each armed with a rather small tooth; tibia short, very thick, straight, with a short, strong mucro at the extremity. Front coxæ distinctly separated.

Only one example was obtained of this very distinct species.

65. **Bruchus cruentatus.**

Bruchus cruentatus, Horn, Trans. Am. Ent. Soc. iv. (1873), p. 325[1].

Hab. NORTH AMERICA, Georgia, Illinois, Dacota, and Texas[1].—MEXICO, Guanajuato (*Sallé*), Jalapa (*Höge*).

66. **Bruchus flaviventris.**

Brevis, niger, supra ochraceo, subtus pallido-griseo, vestitus; antennis, pedibus abdomineque flavis; elytris disco rufo bimaculato; femoribus posterioribus muticis.
Long. $2\frac{1}{3}$ millim.

Hab. GUATEMALA, Dueñas (*Champion*).

Antennæ pale yellow, short, and very broad; third joint rather smaller than the second; joints six to ten strongly transverse. Eyes rather small, widely separated. Thorax transverse-conic, the sides scarcely rounded in front; surface very dull, densely sculptured, with larger punctures in addition to the dense sculpture, the pubescence very pallid ochraceous, uniform and rather abundant. Elytra moderately deeply striate, clothed with pubescence like the thorax, each with a large pale red spot near the suture. Pygidium yellow. Legs including the front coxæ and the hind tarsi yellow. Hind femora not dilated, but rather short and broad, unarmed; tibiæ quite destitute of mucro.

Of this very distinct species, only one example has been procured; though it bears a superficial resemblance to *B. cruentatus*, it is not closely allied to it or to any other recorded here.

67. **Bruchus medialis.**

Brevis, convexus, niger, supra ochraceo, subtus pallido-griseo, vestitus; antennis pedibusque testaceis, illis articulis sexto ad decimum fuscis; elytrorum medio late rufo-fasciato; femoribus posterioribus dente parvo armatis.
Long. 2 millim.

Hab. MEXICO, Guanajuato (*Sallé*).

Antennæ short and broad, third and fourth joints small, each smaller than the second joint. Eyes rather small and widely separated. Thorax short, greatly narrowed in front, the sides rounded in front, the surface densely and rather finely punctulate, and with a rather dense yellow pubescence. Elytra short, rather deeply striate, the interstices aciculate not punctulate; each with a very large pale-red mark nearer the base than the apex, starting from the outer margin and reaching the suture, except for the sutural interval which remains black. Pygidium rather abundantly clothed with pallid pubescence, rather large and convex. Legs bright red, front coxa and the base of the hind femora black. Hind femora not dilated, and armed only with a small sharp tooth; tibia with the anterior angle scarcely longer than the other digits.

Of the three examples on which I describe this species two are males, and have the terminal ventral ring shorter in the middle.

68. **Bruchus interruptus.**

Brevis, minus convexus, subrotundatus, niger, breviter albido pubescens; antennis pedibusque testaceis, illis extrorsum fuscescentibus; elytris rufo-signatis, striatis, striis fortiter punctatis; femoribus posterioribus dente sat elongato armatis.
Long. $2\frac{1}{3}$ millim.

Hab. Mexico, Jalapa (*Höge*), Toxpam (*Sallé*); Guatemala, Cerro Zunil (*Champion*).

Antennæ short and stout; second, third, and fourth joints subequal. Thorax short, with rounded sides, very densely punctulate. Elytra either marked with a red vitta, which is intruded upon by a black spot on the middle of the outer margin, or quadrimaculate by the extension of this black spot inwards to the suture; the punctuation of the striæ unusually distinct, and the interstices densely punctulate. Hind femur armed with a rather long slender tooth; tibia short and stout, with a distinct moderately short apical mucro.

This species is allied to *B. cruentatus*, but has numerous points of difference; the front coxæ, as in that species, are distinctly minutely separated. Only two Mexican and two Guatemalan examples have been obtained.

69. **Bruchus seclusus.**

Brevis, parum convexus, subrotundus, niger, subtiliter albido-pruinosus; antennarum basi pedibusque anterioribus ex parte rufis; prothorace elytrisque densissime punctulatis; femoribus posterioribus dente elongato armatis.

Long. 3 millim.

Hab. Panama, Volcan de Chiriqui 2500 to 4000 feet (*Champion*).

This and the following five species present an extreme similarity to one another, but after comparison I am unable to treat them as one species, although I have only one or at most two of each before me. They agree in having the upper surface densely punctulate and of a uniform black colour, which receives a somewhat leaden tinge from the very fine minute pallid pubescence with which it is uniformly covered. In the present species the antennæ are short and broad, with the basal four joints rufous, the rest black. The thorax is broad, much narrowed in front, curvate at the sides, the surface very densely minutely punctulate, faintly channelled in front of the scutellum; the latter broad. Elytra finely striate, very densely and finely punctulate. Pygidium similar in colour and clothing to the anterior parts. Front and middle legs rufous at the apex, becoming black at the base. First ventral ring longer than all the others together; breast very coarsely punctate. Hind femora not dilated, each armed with a long tooth; tibia broad, armed with a moderately short mucro.

Only one example has been obtained. The front coxæ are apparently contiguous at the apex.

70. **Bruchus monachus.**

Brevis, latus, subrotundulus, niger, subtiliter albido-pruinosus; antennarum basi pedibusque anterioribus rufis; prothorace elytrisque densissime punctulatis; femoribus posterioribus dente elongato armatis.

Long. $2\frac{1}{2}$ millim.

Hab. Guatemala, Zapote (*Champion*).

This species is excessively similar to *B. seclusus*, but is rather smaller, the elytra are

somewhat more deeply striate, there are six joints yellow at the base of the antennæ, and the four front legs are bright red; the anterior coxæ are separated by a fine lamina. In other respects similar to *B. seclusus*.

One example.

71. **Bruchus ægrotus.**

Brevis, parum convexus, subrotundus, niger, subtiliter albido-pruinosus; antennarum basi pedibusque anterioribus ex parte rufis; prothorace elytrisque densissime punctulatis; pygidio basi albido trimaculato; femoribus posterioribus dente elongato armatis.
Long. $2\frac{1}{2}$ millim.

Hab. GUATEMALA, Zapote (*Champion*).

This species is readily distinguished by the three white spots at the base of the pygidium, the middle one of which is quite conspicuous, but that at each anterior angle is quite small; the front coxæ are distinctly separated, and the mucro at the apex of the hind tibia is moderately long. In other respects it is extremely similar to *B. seclusus*.

One example.

72. **Bruchus semicolon.**

Brevis, niger, subtiliter albido-pruinosus; antennis pedibusque rufis, illis subgracilibus extrorsum fuscescentibus; femoribus posterioribus (apice excepto) nigris; pygidio basi albido bimaculato.
Long. $2\frac{1}{2}$ millim.

Hab. GUATEMALA, Capetillo (*Champion*).

This species is readily distinguished by the large spot of white pubescence at each front angle of the pygidium, by the more slender antennæ, the penultimate joint being about as long as broad, and by the red posterior legs; the hind tibia is remarkably broad. The front coxæ are apparently contiguous at the apex, and the tooth of the hind femur is rather long, though, as the unique example is in a very rigid condition, I have not been able to see these two latter points with complete certainty. The elytra are rather deeply striated, and the scutellum is not transverse, both covered with white pubescence. The prothoracic punctuation is excessively dense, and there is scarcely any appearance of a channel at the base.

73. **Bruchus cognatus.**

Sat latus, subovatus, niger, albido-pruinosus; antennarum basi pedibusque anterioribus ex parte rufis; prothorace densissime punctulato; femoribus posterioribus dente elongato armatis.
Long. $2\frac{1}{2}$ millim.

Hab. MEXICO, Saltillo in Coahuila (*Dr. Palmer*).

This species is not quite so broad as its allies, and the pubescence is not quite so fine, so that it approaches in these respects to *B. pruininus*; the first ventral ring, moreover, is not quite so long as all the rest together; the front coxæ are separated by a fine

lamina; the sculpture of the interstices of the wing-cases is aciculation rather than punctuation, and the scutellum is minute, and clothed with white pubescence. The front legs are red, but with the tarsi more obscure, and the bases of the femora dark.

One example.

74. **Bruchus piger.**

Brevis, subovatus, niger, subtiliter albido pruinosus; antennarum basi pedibusque anterioribus rufis; prothorace elytrisque densissime punctulatis; femoribus posterioribus dente elongato armatis.
Long. 2 millim.

Hab. MEXICO, Guanajuato (*Sallé*); NICARAGUA, Chinandega (*Sallé*).

This obscure little insect is very closely allied to *B. monachus*, but is considerably smaller, and has only four joints red at the base of the antennæ, and is further distinguished from the allies by the extreme diminution of the coarse punctuation on the metasternum. The lamina between the apex of the front coxæ is excessively minute.

One example from each locality.

§ 5. *Ventral rings elongate; pygidium oblique or subhorizontal; size never very small, in a single species only does the length descend to 2 millim. Femora only moderately dilated, armed usually with a tooth and two denticles; rarely one denticle, and still more rarely both, may be absent.*

This group is heterogeneous, but as it contains comparatively few species it would be of no use for the purposes of this work to subdivide it. I may mention, as additional characters, that the head is very short, the eyes widely separated, the antennæ feeble and subserrate; the thorax is conic, with the sides convex, or in *B. oblongo-guttatus* of peculiar subtransverse form. An important peculiarity of the group is that in several species the femora of the male are deeply channelled beneath nearly or quite to the base, while in the female they are of the normal form. This character, however, is found only in certain of the species.

75. **Bruchus humeralis.**

Bruchus humeralis, Gyll. in Schönh. Curc. i. p. 39[1].

Hab. MEXICO[1], Ventanas 2000 feet (*Forrer*), Almolonga (*Flohr*), Cordova, Capulalpam, Yolos, El Cameron (*Sallé*), Oaxaca (*Höge*); GUATEMALA, near the city 5000 feet (*Salvin*), San Gerónimo, San Joaquin in Vera Paz (*Champion*).

The extension of the red colour in this species is subject to a great deal of variation. In the male the hind femur is very deeply channelled quite up to the trochanter; there is not much difference in the last abdominal ring in the sexes, though in the male it is a little emarginate in the middle. The armature of the hind femur is rather peculiar,

as there is on the hind margin of the large tooth a very obsolete denticle, and at the base of the tooth a second indistinct denticle.

76. **Bruchus cinerifer.**

Bruchus cinerifer, Fåhr. in Schönh. Curc. v. p. 21[1].

Hab. MEXICO (*Chevrolat*[1]), Vera Cruz (*Sallé*), Jalcomulco (*Flohr*); GUATEMALA, San Gerónimo (*Champion*).

Herr Flohr obtained this insect from the seeds of a Mimosa. According to an example from Sturm's collection, obtained by M. Sallé, it is the *B. incanus* of that entomologist.

77. **Bruchus immunis.**

Oblongo-ellipticus, niger, griseo vel fusco vestitus; pedibus quatuor anterioribus antennarumque basi testaceis; prothorace transverso-conico, lateribus rotundatis, fortiter punctato; pygidio magno, obliquo; femoribus posterioribus dente elongato denticulisque duobus armatis.

Long. 5 millim.

Hab. PANAMA, Peña Blanca 3000 to 4000 feet, San Lorenzo (*Champion*).

This species is very closely allied to *B. humeralis*, but, so far as I can judge from two examples, is a considerably smaller and more slender insect, with more slender antennæ, paler anterior legs, two well-marked denticles on the femur, and well-marked differences in the structure of the ventral rings. In the female the apical ring is as long as the basal one, in the male it is much shorter, and in the middle somewhat excised, so as to be there only half as long as the basal ring; the intermediate rings are rather shorter than those of the female of *B. humeralis*. The two examples before me differ in colour, one being pale grey, the other fuscous; there is a faint indication of some red colour at the base of each wing-case. The male femora are canaliculate, as in *B. humeralis*.

78. **Bruchus viduatus.**

Oblongo-ellipticus, nigricans, hic inde rufescens; antennarum basi pedibusque rufis, tibiis tarsisque posterioribus obscuris; prothorace transversim conico, lateribus rotundatis, sat fortiter punctato; femoribus posterioribus dente elongato denticulisque duobus, subobsoletis, obtusis armatis.

Long. $3\frac{1}{2}$ millim.

Hab. PANAMA, Caldera 1200 feet, Volcan de Chiriqui 2000 to 3000 feet (*Champion*).

Another very close ally of *B. humeralis*, though not half the size of the smallest examples of that species and with the wing-cases a good deal shorter, with no distinct red mark, and the pubescence of the surface much less white. The structural and sexual characters are extremely similar to those of *B. humeralis*, but in *B. viduatus* the apical ventral ring in the female is considerably longer. Both on the upper and under surfaces there are vague red marks, differing in the two examples, and no doubt variable and unimportant. Besides the typical pair from Caldera I also refer to the species

another pair from the Volcan de Chiriqui, in which the two denticles of the femora are less obsolete.

79. **Bruchus sallæi.**

Oblongo-subellipticus, fuscus, griseo vestitus; elytris tenuiter griseo vestitis, maculis oblongis fuscis, corpore hic inde plus minusve rufescente; antennis nigris, basi ac pedibus rufis; prothorace transverso, antrorsum angustato, fortiter punctato; femoribus posterioribus dente elongato denticulisque duobus instructis. Long. 5–5½ millim.

Hab. MEXICO, Guanajuato (*Sallé*), San Luis Potosi (*Dr. Palmer*); GUATEMALA, San Gerónimo (*Champion*).

Antennæ not stout, the four basal joints red, the tenth joint not quite so long as broad. Head moderately broad; eyes but little prominent, widely separated. Thorax short and broad, much narrowed in front, the sides in front very little rounded, coarsely punctate and covered with a griseous pubescence. Elytra of a fuscous colour, more or less tinged with red according to the individual, clothed with a sordid griseous pubescence which permits oblong spots of the ground-colour to appear; sides and apex darker; third, fourth, and fifth intervals with a small elevation at the extreme base. Pygidium elongate, oblique, the ground-colour and pubescence similar to that of the elytra, both variable. Hind body rather uniformly and closely clothed with griseous pubescence. Legs sordid red, the femora sometimes marked with black. Intermediate ventral rings elongate, the apical ring in the female about as long as the basal ring, in the male much shorter in the middle; in the latter sex the hind femora are deeply canaliculate to the base. The tooth of the femur is moderately long, the two denticles placed very near it, rather obtuse; tibia rather slender, straight, its apical truncature not oblique, the anterior angle not mucronate.

This species was labelled *B. ingæ* in Sallé's collection; but all the evidence I have been able to procure makes me treat it as not that species. Dr. Palmer bred *B. sallæi* from the seeds of an Acacia. We have received only one typical example from Guatemala. A second example, found at Capetillo, is only 3 millim. long, and has the antennæ yellow, but appears to agree in structural characters with the larger examples, so that at present I cannot form any valid opinion about it.

80. **Bruchus prosopis.**

Bruchus prosopis, Lec. Proc. Ac. Phil. 1858, p. 77[1]; Horn, Trans. Am. Ent. Soc. iv. (1873), p. 331[2].

Hab. NORTH AMERICA[1], Colorado desert, California, Arizona, Colorado and Gila Rivers[2].—MEXICO, Oaxaca (*Höge*); GUATEMALA, near the city, 5000 feet (*Salvin*).

We have received only one example from Mexico, and another from Guatemala; the latter, found by Mr. Salvin, quite agrees with a North-American specimen transmitted by Dr. Horn. The Mexican exponent is, however, destitute of the pygidial impressions; it

being a male and the others females, I presume this is a sexual distinction. The species has a long slender mucro at the apex of the hind tibia.

81. **Bruchus longiventris.**

Suboblongus, parum convexus; supra ferrugineus, fusco albidoque variegatus, subtus niger, albido-vestitus; antennis pedibusque testaceis; prothorace subtransverso, disperse sat fortiter punctato; femoribus posterioribus dente parum elongato denticulisque duobus instructis.
Long. $3\frac{1}{2}$ millim.

Hab. NORTH AMERICA, Arizona (*Morrison*).—MEXICO, Northern Sonora (*Morrison*).

Of rather narrow, slightly convex form, with the pygidium elongate and more horizontal than usual. Antennæ entirely pale yellow, not stout, subserrate, the penultimate joint about as long as broad. Head short, the eyes widely separated. Thorax with the sides rounded in front. Scutellum not elongate. Elytra with dark marks at the sides and apex, and also dark along the suture, bearing a fuscous pubescence with indistinct paler spots, the punctuation of the striæ more than usually distinct. Pygidium clothed with fuscous, white at the sides, the white extending inwards at the middle. All the legs yellow. Under surface clothed with white pubescence; terminal ventral ring equal in length to the basal ring. Hind legs slender; femora not dilated, with a rather small acute tooth and two small acute denticles; tibia slender, straight, not at all mucronate at the front angle. Male with a large impression on the terminal ventral ring, scarcely visible in the female; femora not channelled.

This species was distributed by the late Mr. Morrison with the name *B. prosopis*; although abundantly distinct from that species I think it may possibly prove to be identical with *B. protractus*, Horn, described on a single example from the peninsula of Lower California.

82. **Bruchus insolitus.**

Sordide ferrugineus, ochraceo vestitus, pectore nigricante; antennis pedibusque testaceis, pedibus posterioribus rufis; prothorace conico, antrorsum angustato, disperse sat fortiter punctato; femoribus posterioribus dente elongato denticulisque duobus prominulis instructis.
Long. $3\frac{1}{4}$ millim.

Hab. GUATEMALA, near the city (*Champion*).

Antennæ short and stout, yellow, the penultimate joints transverse. Thorax nearly as long as it is broad at the base, much narrowed in front, the sides not rounded, the hind angles very acute. Scutellum quadrate. Elytra very finely striate-punctate, covered with a fine pubescence which is scarcely variegate. Pygidium moderately large, densely clothed with pubescence. Hind femora moderately dilated, armed with a long tooth, and two acute and prominent denticles, the tibia thick, the knee bent, the apex oblique so that the anterior angle forms a stout, short, prominent angle. First ventral ring about as long as the four other rings together.

A peculiar species, possessing many of the characters of the *B. humeralis* allies, such as

the more elongate form, the short head, the rather deep dispersed thoracic punctuation, and the less abbreviate intermediate ventral rings, but with a more elongate thorax and more acute hind angles thereto than any of the allies. The only example taken is presumed to be a male, the terminal ventral ring being slightly shorter in the middle than at the sides, and only about the length of the preceding ring. The femora are not canaliculate.

83. **Bruchus lineaticollis.** (Tab. XXVI. fig. 12.)

Suboblongus, parum convexus, rufescens; prothorace medio griseo lineato, pygidio fusco medio apiceque griseis, elytris tenuiter griseo submaculatis, pectore nigricante, antennis pedibusque testaceis; prothorace conico, disperse fortiter punctato; femoribus posterioribus dente elongato denticulisque duobus acutis instructis.
Long. $3\frac{1}{2}$ millim.

Hab. GUATEMALA, Panajachel 5000 feet (*Champion*).

Antennæ entirely yellow, short, the penultimate joints strongly transverse. Thorax elongate, greatly narrowed in front, the sides slightly rounded, with a very distinct line of pallid pubescence extending all along the middle. Elytra elongate, finely striate, with extremely indistinct linear spots of griseous pubescence near the suture. Pygidium of a beautiful dark fuscous colour at the apex, and divided along the middle by pallid pubescence.

Only one example was obtained. The species agrees in structural characters with *B. insolitus*, though very distinct therefrom by the coloration of the thorax and pygidium. The specimen is presumed to be a male, the structure of the hind legs and ventral rings being similar to *B. insolitus*.

84. **Bruchus championi.**

Suboblongus, parum convexus, minus vestitus, rufus; elytris pygidioque tenuiter albido variegatis; prothorace utrinque ochraceo vestito, transverso, densissime punctato; femoribus posterioribus dente sat elongato instructis.
Long. 3 millim.

Hab. PANAMA, Volcan de Chiriqui 2000 to 3000 feet (*Champion*).

A very distinct species; the form somewhat that of a minute *B. oblongo-guttatus*, but the thorax is not margined at the sides. The antennæ are yellow, the penultimate joints strongly transverse. The elytra are short, with a few white flecks at the extreme base, the scutellum being also covered with white; across the middle there is a very irregular band of white elongate marks, connected with a short second band behind. The pygidium is red, with three white marks at the base, and a fainter longitudinal mark near the apex. The intermediate abdominal rings are unusually elongate, the penultimate ring being about as long as the terminal one. The femora are scarcely dilated, and the short thick tibia is armed with a definite somewhat short mucro. The unique example is presumed to be a male, though the apical ring is not at all excised; the hind femur is canaliculate for more than half its length.

85. **Bruchus oblongo-guttatus.**

Bruchus oblongo-guttatus, Fåhr. in Schönh. Curc. v. p. 86[1].

Hab. MEXICO[1], Vera Cruz, Tampico (*Sallé*), Cerro de Plumas, Oaxaca (*Höge*), Jalcomulco (*Flohr*); GUATEMALA, San Joaquin, Chacoj, and Panzos (*Champion*).

86. **Bruchus quadrimaculatus.**

Bruchus quadrimaculatus, Fabr. Ent. Syst. i. 2, p. 371[1]; Oliv. Ent. iv. 79, p. 19, t. 3. f. 24[2]; Horn, Trans. Am. Ent. Soc. iv. (1873), p. 318[3].

? *Bruchus barbicornis*, Fabr. Syst. El. ii. p. 403[4]; Gemm. & Har. Cat. Col. x. p. 3229[5].

Hab. NORTH AMERICA[1 2], Southern States[3].—MEXICO[5]; BRITISH HONDURAS, Belize (*Blancaneaux*).—WEST INDIES[3].

I quote only such synonymy as concerns our region, and even some of this is not perfectly ascertained. Fabricius[4] gave no locality for *B. barbicornis*, and I doubt whether his description applies to this species, but in the Munich Catalogue[5] the Fabrician name is recorded as a synonym thereof, and Mexico added as the habitat. The North-American *B. sinuatus*, Fåhr., is also given[5] as another synonym, but this likewise appears doubtful.

The species is very difficult to locate, as notwithstanding its similarity to *B. scutellaris* as to the structure of the legs, it differs much in the elongate ventral rings and the oblique pygidium: the femora are canaliculate.

Only three examples have been obtained in our region.

§ 6. *Size minute, only from* $1\frac{1}{4}$ *to* 2 *millim. in length; femora not, or only slightly incrassate, sometimes simple, their armature slight, at most a small tooth and two denticles.*

As compared with Group § 2 the members of the group I am now defining are distinguished by their still smaller size and diminished femoral structure; but these characters are not very definite, and the two groups are only separated for convenience of reference, as each contains a considerable number of species.

87. **Bruchus pullatus.**

Minimus, niger, tomento griseo maculatim vestitus; antennarum basi pedibusque testaceis, pedibus posterioribus nigro-variegatis; prothorace subconico; antennis parum latis, subserratis; femoribus posterioribus dente tenui denticulisque duobus minutissimis armatis.

Long. $1\frac{2}{3}$ millim.

Hab. MEXICO, Guanajuato (*Sallé*); GUATEMALA, near the city, Capetillo, San Gerónimo (*Champion*); NICARAGUA, Chinandega (*Sallé*); PANAMA, Bugaba (*Champion*).

Head short, with small, very prominent, deeply divided eyes. Antennæ slender; four basal joints yellow, the penultimate joint a little longer than broad. Thorax transverse-

conic, much narrowed towards the front, the sides but little rounded, clothed with griseous pubescence at the sides, dark on the middle, with a fine grey line dividing the dark part, this latter coarsely punctate. Elytra black, with well-marked griseous spots, finely striate. Pygidium clothed with griseous pubescence; along the middle this is denser, so as to form a line. Front and middle legs clear yellow; hind legs also yellow, but with the base of the femora dark, and the upper part of the tibia sometimes clouded. Femora armed with a slender tooth and two denticles; tibia with a long slender mucro at the extremity.

Only one or two examples are extant from each locality. I have some doubt whether the unique exponent from Mexico really pertains to the species, as it has the surface less variegate, the spots on the elytra being less definite, and the medial dark space on the thorax absent.

88. **Bruchus stylifer.**

Minimus, niger, griseo vestitus; antennarum basi pedibusque rufis, femoribus posterioribus ex parte majore nigris, elytris ad latera nigro submaculatis; femoribus posterioribus dente gracili denticulisque duobus minutissimis armatis; tibiis longissime mucronatis.

Long. $1\frac{1}{2}$ millim.

Hab. MEXICO, Guanajuato (*Sallé*).

Very similar to *B. pullatus*, but with only one black spot on each wing-case, placed on the outer margin, and with the apical mucro of the hind tibia still longer than in *B. pullatus*.

Three examples.

89. **Bruchus pedicularius.**

Minimus, niger, griseo vestitus; elytris ad latera nigro submaculatis; prothorace subconico; antennis serratis; femoribus posterioribus dente tenui denticulisque duobus minutissimis armatis.

Long. $1\frac{1}{3}$ millim.

Hab. GUATEMALA, near the city (*Champion*).

Closely allied to *B. pullatus*, but considerably smaller, and readily distinguished therefrom by the black legs and base of the antennæ, and by the almost uniform clothing of the upper surface; the antennæ, too, are rather differently constructed, being serrate from the fourth joint outwards. The two penultimate ventral rings are considerably shorter than the second ring.

90. **Bruchus pusillimus.**

Minimus, niger, griseo vestitus; antennarum basi, tibiis tarsisque quatuor anterioribus sordide testaceis; prothorace subtransverso; antennis parum latis, serratis; femoribus posterioribus submuticis, dente minutissimo armatis.

Long. $1\frac{1}{3}$ millim.

Hab. MEXICO, Toxpam, Guanajuato (*Sallé*); GUATEMALA, near the city (*Champion*).

Antennæ serrate from the fifth joint outwards, the penultimate joints transverse, the four basal joints pale. Thorax evidently transverse, the sides rounded in front, the punctuation obscured by the pubescence. Elytra covered with grey pubescence, immaculate. Hind femur almost unarmed, there being only an extremely minute tooth; tibia with a very slender, short, apical mucro.

The individuals of this species are smaller than those of any other species of *Bruchus* known to me. Its characters bring it near to *B. apicalis*, but it is very different from that species by its less elongate wing-cases, which are unicolorous; it has, moreover, the fourth joint of the antennæ smaller. It is still more similar to *B. pedicularius*, but is quite distinct therefrom by the different armature of the hind femora and tibiæ, as well as by the dilute colour of the base of the antennæ. I do not see any sexual distinctions among the six examples obtained of the species. The terminal ventral ring is extremely abbreviate.

I am rather doubtful whether the unique exponent from Guanajuato belongs really to this species, as it is larger than any of the individuals obtained in Guatemala, and has the legs entirely black.

91. **Bruchus brevipes.** (Tab. XXVI. fig. 14.)

Minimus, brevis, niger, griseo vestitus; antennarum basi pedibusque rufis, femoribus posterioribus ex parte majore nigris; antennis brevibus, subclavatis; prothorace fortiter transverso; femoribus posterioribus dente minutissimo armatis.

Long. $1\frac{1}{4}$ millim.

Hab. GUATEMALA, near the city, Zapote (*Champion*).

Antennæ with the intermediate joints quite small; joints 7–10 strongly transverse. Front and middle legs entirely red; hind femora black, with the apex broadly red; tibia with an excessively short apical mucro.

This minute insect greatly resembles *B. pusillimus*, but is readily distinguished from that species by the colour of the legs, and the two actually differ in several other respects. No other species amongst the near allies has the antennæ so short and clavate as they are in *B. brevipes*; joints 7–11 form an almost abrupt club of about the same length as the more slender six basal joints.

92. **Bruchus flavicornis.**

Minimus, niger, dense griseo vestitus; antennis pedibusque læte rufo-testaceis, his parum latis, intus subserratis; femoribus posterioribus muticis.

Long. $1\frac{2}{3}$ millim.

Hab. MEXICO, Guanajuato (*Sallé*).

Antennæ clear yellow, the four basal joints slender, the fifth about as long as broad, the penultimate joints evidently transverse. Thorax transverse, with the sides much rounded in front. Elytra evidently striate.

This little insect will be readily identified by the bright-coloured legs and antennæ, and by the hind femora and tibiæ being unarmed. The whole of the body is nearly uniformly clothed with ochreo-griseous pubescence. Four examples.

93. **Bruchus infirmus.**

Minimus, niger, tenuiter griseo-pubescens; antennis pedibusque rufo-testaceis, illis brevibus, subclavatis; femoribus posterioribus submuticis, dente minutissimo armatis.
Long. $1\frac{1}{2}$ millim.

Hab. GUATEMALA, San Gerónimo (*Champion*).

Although only a single individual has been obtained, and it agrees in the colour of the legs and antennæ with *B. flavicornis*, yet it is clearly a distinct species, being smaller, scantily clothed with pubescence, and with much shorter antennæ, the joints from the fifth outwards being transverse. There exists, moreover, a very minute denticle or tooth on the hind femur, which I have not been able to detect in *B. flavicornis*. The apex of the hind tibia is, as in *B. flavicornis*, destitute of mucro.

94. **Bruchus æqualis.**

Minimus, niger, dense æqualiter griseo vestitus; antennarum basi pedibusque testaceis, femoribus posterioribus basi late nigra, dente gracili denticulisque duobus minutissimis armatis; antennis latiusculis, subclavatis.
Long. $1\frac{2}{3}$ millim.

Hab. MEXICO, Guanajuato, Toxpam (*Sallé*).

Antennæ stout and rather short, the four basal joints yellow; joints 6–10 black, strongly transverse. Thorax transverse-conic, the sides a little rounded in front, the sculpture concealed by the clothing. Pygidium rather large. Three terminal ventral rings rather short. Hind femora black, with the apex red, armed with a rather long slender tooth and two extremely obscure denticles; tibiæ with only a very short apical mucro.

Very similar to *B. flavicornis*, though readily recognized from that species by the colour of the antennæ. Four examples.

95. **Bruchus probus.**

Minus convexus, niger, griseo vestitus; antennis pedibusque rufo-testaceis, his extrorsum fuscescentibus, subclavatis; femoribus posterioribus submuticis, dente omnium minutissimo armatis.
Long. $2–2\frac{1}{8}$ millim.

Hab. GUATEMALA, Zapote (*Champion*).

Antennæ broad, joints 5–10 strongly transverse, infuscate. Thorax transverse-conic, the sides rounded and narrowed in front; coarsely punctate, the punctuation somewhat obscured by the clothing. Elytra rather short, their striæ distinctly punctured. Pygidium rather large, far from perpendicular in its direction, rather densely pubescent, and with a condensation of the pubescence at the base in the middle, so as to form a

cuneiform mark. The four terminal ventral rings rather elongate. Hind tibia digitate at the extremity, without a longer mucro.

This is distinguished from the preceding species by the greater elongation of the ventral rings, and in this respect connects the following species with the more ordinary forms of this group. Two examples.

96. **Bruchus longulus.** (Tab. XXVI. fig. 15.)

Angustulus, subelongatus, subdepressus, niger, ochreo vestitus; antennis pedibusque rufis, illis extrorsum fuscescentibus, parum latis; prothorace transverso, fortiter punctato; femoribus posterioribus muticis.
Long. 2 millim.

Hab. GUATEMALA, Capetillo (*Champion*).

Antennæ rather short, and not broad, becoming almost gradually thicker to the extremity; joints 6–11 infuscate, 7–10 transverse, the basal joints red. Thorax with the sides greatly rounded in front, the base very feebly lobed in the middle, the punctures coarse but much concealed by the pubescence. Elytra elongate, finely striate. Ventral rings elongate.

This is a peculiar species of elongate form. Only three examples have been procured, two males and a female. In the latter sex the ventral rings are more elongate, especially the terminal one, and the pygidium is correlatively more horizontal in its direction. In the males there is a rather short mucro at the apex of the hind tibia, which is not present in the unique female, probably having been broken off by accident.

97. **Bruchus apicalis.**

Minimus, angustulus, niger, æqualiter griseo vestitus; elytrorum apice, antennarum basi pedibusque anterioribus testaceis; antennis parum latis, serratis; prothorace subtransverso; femoribus posterioribus dente minuto armatis.
Long. $1\frac{2}{3}$ millim.

Hab. GUATEMALA, Champerico (*Champion*).

Black, rendered quite grey by a fine griseous pile, the extremity of the wing-cases yellow. Antennæ rather slender; the four basal joints yellow, each small; joints 5–11 dark, the penultimate joint scarcely broader than long. Head broad, very short, the rather small eyes very prominent, very deeply divided. Thorax rather broader than long, the sides much rounded in front, the sculpture concealed by the clothing. Elytra elongate and narrow, very finely striate. The four anterior legs yellow, the posterior ones black, but the extremity of the tibia and the tarsus more or less flavescent. The femur armed with a minute tooth, the short tibia digitate at the apex but without a longer mucro. The four terminal ventral rings of about one length in the middle.

A small series of nine examples was obtained on the sea-coast. If, as I suppose, I have both sexes before me, the distinctions between them are very slight.

98. **Bruchus filarius.**

Angustulus, subdepressus, niger, griseo vestitus; antennarum basi pedibusque anterioribus rufis, illis latioribus; femoribus posterioribus dente minutissimo armatis.
Long. $1\frac{7}{8}$ millim.

Hab. GUATEMALA, Zapote (*Champion*).

Antennæ very broad, thickened from the third joint outwards, the basal two joints red, the others black, the penultimate joints strongly transverse. Thorax slender, but not so long as broad, the sides rounded and narrowed in front, the sculpture concealed by the rather dense clothing. Elytra rather elongate, finely striate. Pygidium with the pubescence along the middle denser. The terminal four ventral rings elongate. Front legs red, the apices of the femora and the tibiæ of the middle legs also of this colour. Hind femora with a very minute denticle; tibia slender, without mucro.

Only one example has been obtained. The structure of the antennæ distinguishes it well from the allies, and it is also of unusually narrow form.

99. **Bruchus restrictus.**

Minimus, sat elongatus, niger, griseo vestitus; antennarum basi pedibusque anterioribus rufis; antennis parum latis, intus subserratis; prothorace minus transverso; femoribus posterioribus dente gracili denticulisque duobus minutissimis armatis.
Long. $1\frac{2}{3}$ millim.

Hab. GUATEMALA, Zapote, San Gerónimo (*Champion*).

Antennæ with the four basal joints yellow, the others black, the penultimate joints scarcely transverse. Thorax slender, not much narrowed in front, though a little rounded near the front angles, the punctuation concealed by the clothing. Elytra rather elongate, finely striate. Front legs entirely red; middle legs reddish with the femora in great part darker; hind legs entirely black, the tibia with a short mucro at the apex.

Another minute and obscure insect, without any salient character. The thorax, though rather elongate, has but little of the conical form. Only one example is extant from each locality.

100. **Bruchus optatus.**

Minimus, haud elongatus, niger, griseo vestitus; antennarum basi pedibusque anterioribus testaceis; antennis sat elongatis, serratis; prothorace transverso-conico, fortiter punctato; femoribus posterioribus dente gracili denticulisque duobus minutissimis armatis.
Long. $1\frac{1}{2}$ millim.

Hab. GUATEMALA, near the city (*Champion*).

Antennæ moderately long; the three basal joints obscure yellow, the fourth joint small, serrate from the fifth joint outwards, the penultimate joints somewhat strongly transverse. Thorax much narrowed to the front, where the sides are but little rounded. Pygidium rather small, perpendicular. Last four ventral rings rather short, subequal

in length. Tooth of the hind femur rather elongate, slender; tibia quite without mucro.

An obscure insect, which I am not able to associate with any species here described. It comes nearest to *B. restrictus*, but has the thorax more conic, with the hind angles more acute, and the hind tibia quite destitute of mucro. One example.

101. **Bruchus viduus.**

Minimus, niger, tenuiter griseo-pubescens; antennarum basi pedibusque anterioribus testaceis; antennis sat elongatis, minus crassis, subserratis; prothorace densissime sculpturato; femoribus posterioribus dente minuto denticulisque minutissimis armatis.

Long. $1\frac{1}{2}$ millim.

Hab. GUATEMALA, near the city (*Champion*).

Antennæ rather elongate, longer than the head and thorax; third joint a little longer than the second or the fourth, the fifth triangular, about as long as broad, the penultimate joints transverse, but only slightly so. Thorax transversely conic, the sides rather rounded in front. Scutellum minute, covered with white pubescence. Elytra finely striate, only very minutely and scantily pubescent, as also is the under-surface of the body. The front legs are yellow, the femora black at the base, the intermediate tibiæ and tarsi yellow.

I find it difficult to form an opinion as to the nearest ally of this obscure insect, but on the whole it appears best placed near *B. restrictus*, from which, however, it differs by the scanty clothing and the armature of the hind legs. The tooth of the femur is very minute, and there appear to be three very minute denticles beyond it and one or two distant denticles or serrations in front of it. The hind tibia is a little curvate and destitute of apical mucro. One example.

§ 7. *Form subcubical, very elevated; hind femora simple, with a broad channel beneath, extending from the base to the apex.*

So far as our fauna is concerned, this is the most distinct of all the groups adopted here, and entitled in our region to generic distinction. The lower face of the hind femur is not in the least convex, but quite straight or very feebly concave, and is limited on either side by a fine line extending from base to apex, and the inner of these lines may be minutely crenate for all its length. The antennæ are frequently flabellate in the male, flabello-clavate in the female. The very short thorax is much narrowed in front.

102. **Bruchus cubiciformis.** (Tab. XXVI. fig. 16.)

Niger, antennarum basi tibiisque fuscis, tarsis rufis, elytris fusco-subnebulosis, pygidio dense ochraceo-vestito, corpore subtus tantum tenuiter griseo-vestito; elytris fortiter profundeque seriatim punctatis; antennis maris longius, feminæ breviter, flabellatis.

Long. $3\frac{1}{2}$ millim.

Hab. MEXICO, Cordova, Toxpam (*Sallé*), Cerro de Plumas (*Höge*); BRITISH HONDURAS, Belize (*Blancaneaux*); GUATEMALA, El Tumbador 2500 feet (*Champion*).

Thorax short, greatly narrowed in front, the sides concavely arcuate, the surface rather uneven, with a longitudinal depression along the middle, the sides of which are but little elevated, the depression in front of the scutellum broad and indefinite; the surface bears rather numerous coarse punctures, which are closest and most distinct near the sides and front margin. Elytra a little depressed along the suture, with numerous series of very large punctures, the interstices slightly uneven. Pygidium very elongate, densely covered with a griseous or ochreous pubescence, and with rather numerous deep punctures covered by the clothing. Under-surface dark, being only sparingly clothed, with a more or less conspicuous condensation of pallid pubescence on the posterior portion of the parapleuræ.

In the male, joints 5–10 of the antennæ are each furnished with a long process, each process being about as long as joints 6–10 together; the fourth joint also possesses a shorter, though still elongate, process, and the terminal joint is elongate. In the female the fourth joint is nearly simple, the fifth to the eighth becoming gradually broader, the fifth being at the apex rather broader than long; joints 8–10 are similar to one another, and the terminal joint is short. In the female the last ventral ring is excessively short in the middle. A male example is figured.

103. **Bruchus leucurus.**

Niger, supra brunneo vestitus; elytris griseo submaculatis, pygidio corporeque inferius pallide ochraceo vestitis, antennis pedibusque anterioribus et intermediis testaceis, illis apicem versus fuscescentibus; elytris fortiter regulariter, seriatim punctatis; antennis maris longius, feminæ breviter, flabellatis.

Long. 3–3¾ millim.

Hab. MEXICO (*Sallé, ex coll. Sturm*), Cerro de Plumas, Paso del Macho (*Höge*); GUATEMALA, Capetillo, Calderas (*Champion*).

This species is very closely allied to *B. cubiciformis*, but is clothed above with more pubescence, usually of a more pallid colour, and is readily distinguished by the dense pallid clothing of the ventral rings; the elytra are rather more elongate, even, and with more regular rather less coarse rows of punctures; the pygidium and last ventral ring are rufescent, the former more or less maculate with black; but this coloration is much concealed by the pallid clothing of these parts. The pygidium is considerably narrower than it is in *B. cubiciformis*. The structure of the antennæ and the last ventral ring are apparently similar to those of the corresponding sex of *B. cubiciformis*; but in the female the last ventral ring is shorter in the middle, differing in this respect but little from the other sex; the antennæ of the female appear to be more clavate than those of the same sex of *B. cubiciformis*, owing to the fact that joints 4–6 are more slender. I have seen only two examples of the male, both of which are of darker colour

than the females, of which sex four examples are before me. Sallé obtained the species from Sturm's collection, the male being ticketed by this latter entomologist "*Bruchus plumicornis*, mihi," and the female "*Bruchus albiventris*, mihi."

104. **Bruchus callirhipis.**

Niger, supra variegatus; elytris albido-nebulosis, pygidio corporeque inferius albido vestitis, antennis pedibusque anterioribus et intermediis testaceis, illis versus apicem fuscescentibus, pedibus posterioribus rufis, femoribus fuscescentibus; elytris fortiter regulariter seriatim punctatis.
Long. $3\frac{1}{4}$ millim.

Hab. NICARAGUA (*Sallé*).

I have seen only two female examples of this species, and, though no doubt very close to *B. leucurus*, yet, as the hind body is somewhat differently formed, I have little doubt they belong to a distinct species. The pygidium does not project so far downwards, and is accurately adapted to the last ventral ring at the apex, and the ventral rings are a little convex in the longitudinal direction. The insect is also of rather shorter form, and the vestiture of the under-surface paler. The species was labelled "*B. callirhipis*, Chevr.," in Sallé's collection, and I have preserved the name for it.

105. **Bruchus contaminatus.**

Niger, tenuiter griseo vestitus, vix variegatus; pygidio corporeque inferius grisescentibus; elytris regulariter crenato-striatis; antennis serratis.
Long. 3–$3\frac{1}{2}$ millim.

Hab. MEXICO (*Truqui*), Guanajuato (*Sallé*), Jalapa, Oaxaca (*Höge*).

This species is of more oblong form than the allies; the surface is less ornamented, and the clothing of the thorax and elytra allows the minute rugose sculpture of the surface to be perceived. The antennæ are black, serrate from the fourth joint outwards, the third joint much longer than the second; the processes given off by the penultimate joints are short, only about as long as the basal joint. Eyes convex, not very widely separated. Thorax very short, greatly narrowed in front, the sides slightly convexly-arcuate; the surface not uneven, densely minutely rugulose, with a slight depression in front of the scutellum griseo-pubescent. Elytra rather elongate, very regularly striate, the punctures of the striæ elongate and so close to one another that the separations between each are indistinct; the interstices densely, minutely, rugosely fusco-pubescent, very minutely flecked with white.

Twenty examples have been obtained of this species, but I am not able to find any sexual distinctions among them.

106. **Bruchus impiger.** (Tab. XXVI. fig. 17.)

Bruchus ramicornis, Boh. (nec Er.) Res. Eugen. Col. p. 112[1]; Horn, Trans. Am. Ent. Soc. v. p. 151.
Bruchus impiger, Horn, Trans. Am. Ent. Soc. iv. (1873), p. 323[2].

Hab. North America, California [1] [2], Arizona (*Morrison*).—Mexico, Northern Sonora (*Morrison*), Guanajuato (*Sallé*); Guatemala, near the city, San Gerónimo, Zapote, Cerro Zunil 4000 to 5000 feet, Capetillo, Calderas, San Juan in Vera Paz (*Champion*); Panama, David (*Champion*).

Although the trivial name proposed by Boheman has priority, it cannot be used on account of the previous *B. ramicornis*, Er.

The species is very variable in the colour of the surface. It appears to occur only sparingly south of Mexico, and I have some doubts whether the Guatemalan exponents may not belong to a distinct species, as the two males found in that country have the processes given off from the fourth and fifth joints of the antennæ longer than they are in northern examples. In the State of Panama only one individual was met with. A figure of a male, found at Cerro Zunil, is given.

107. **Bruchus minutus.**

Bruchus minutus, Fabr. Syst. Ent. ii. p. 401 [1]; Gyll. in Schönh. Curc. i. p. 56 [2]; Gemm. & Har. Cat. Col. xii. p. 3226 [3].

Hab. ? Mexico [3]; Guatemala, Zapote (*Champion*).—South America [1] [2].

This is a very doubtful identification. Both Fabricius and Gyllenhal give South America as the habitat, but the Munich Catalogue mentions Mexico only, and this may be a mere error. The descriptions are very insufficient, and I may therefore state that I have determined as possibly this species a single minute *Bruchus* of the female sex, similar to *B. impiger*, but not half the size of the smallest example of that species.

108. **Bruchus cubicus.**

Kytorhinus cubicus, Motsch. Bull. Mosc. 1873, ii. p. 206 [1].

Hab. Mexico [1].—Brazil [1].

From the description one may suppose this to be a species allied to *B. impiger*, possibly indeed a variety thereof.

109. **Bruchus compactus.** (Tab. XXVI. fig. 18.)

Rufo-fuscus; elytris sæpe rufescentibus, plus minusve vage albido variegatis; pygidio corporeque subtus pube pallide ochraceo-albida vestitis; antennis pedibusque testaceis, fusco variegatis; femoribus posterioribus fusco-rufis; capite pone oculos utrinque dentato.

Long. $3\frac{1}{4}$ millim.

Hab. Guatemala, San Gerónimo (*Champion*).

This is an insect of very deep form, distinguished readily amongst its allies by the very evident denticulation of the head behind the eyes, these latter having a large

extension in the longitudinal direction, and the constriction behind them being remarkably deep and abrupt. The thorax is very short, very greatly narrowed in front, its sculpture quite fine, the surface very pubescent, the pubescence obscurely variegate, the surface a little uneven, owing to a slight elevation extending along each side of the obscure median furrow, and a basal depression on each side external to this. Elytra deeply striate, the striæ with closely placed elongate punctures; the colour varying from reddish to fuscous-red or fuscous, more or less minutely and irregularly flecked with white pubescence. Front and middle legs almost entirely yellow; femora marked with fuscous.

Twelve examples were captured: these exhibit no sexual marks, either in the structure of the ventral rings, or in that of the antennæ. These latter organs are shortly pectinate from the sixth joint outwards, the fifth joint being triangular. Possibly all the individuals are females. The clothing of the under-surface, though pallid, is not pure white. The colour of the surface, independent of the clothing, is evidently very variable. Our artist has not delineated the peculiar postocular structure.

110. **Bruchus leucosomus.**

Brevis, niger; pedibus anterioribus elytrisque rufis, his plus minusve late nigro marginatis, tarsis pedibusque posterioribus rufo-nigris; corpore minus variegato, supra parum, subtus densissime, albido-tecto; elytris fortiter regulariterque striatis; antennis maris longius flabellatis, feminæ breviter pectinato-serratis.
Long. $2\frac{1}{4}$ millim.

Hab. MEXICO, San Andres Tuxtla (*Sallé*); GUATEMALA, San Gerónimo (*Champion*); PANAMA, David (*Champion*).

Antennæ entirely black. Head very abruptly constricted behind the eyes, without any trace of denticle. Thorax very coarsely punctate, black; the white pubescence of the under-surface though extending upwards, becoming scanty at the sides, and there is a feeble line of pallid pubescence along the middle; the inequalities of the surface are very slight. Elytra rather short, with very deep striæ, which are crenate, owing to the confluence of the coarse punctures they bear; of a dark red colour, margined at the suture as well as at the sides with black, and with only a feeble white pubescence. Pygidium and under-surface densely clothed with white pubescence, the former with a transverse black line on the middle. Hind femora and tibiæ bearing externally much white pubescence.

This species is easily identified. Only five examples have been obtained, and from these it is evident that the extent of the red colour on the wing-cases is variable. The species was ticketed *Bruchus propygidialis*, Chevr., in Sallé's collection. One male and two female examples have been received from Mexico, and a single individual in each case from Guatemala and the State of Panama.

111. **Bruchus rubiginosus.**

Kytorhinus rubiginosus, Motsch. Bull. Mosc. 1873, ii. p. 205 [1].

Hab. Mexico [1].

From the description I think it possible this may prove to be a species allied to *B. leucosomus*.

112. **Bruchus leucospilus.** (Tab. XXVI. fig. 19.)

Rufus; capite cum antennis nigro, elytris lineis abbreviatis niveo-pubescentibus; corpore subtus, pygidio, prothoracis lateribus et basi niveo-squamosis, coxis posterioribus nudis nitidis; elytris subnitidis, seriatim fortiter punctatis; tibiis posterioribus longius mucronatis; antennis maris flabellatis, feminæ breviter pectinato-serratis.

Long. $2\frac{3}{4}$–$3\frac{1}{4}$ lin.

Hab. Mexico, Vera Cruz (*Sallé*).

This species is readily distinguished from *B. leucosomus* by the very long spur of the hind tibia, a character found also in *B. reticulatus*. The eyes are very large, and the head abruptly constricted behind them. The dense white clothing of the under-surface extends upwards along the sides and across the whole base of the thorax, but leaves a broad space along the middle bare; this space is coarsely punctate, and has a little white pubescence along the middle. The scutellum is clothed with white pubescence. The elytra have several snow-white longitudinal marks; these are numerous at the base and along the suture, and there are also three, one in front, two behind, on the disc of each elytron; the surface, except for these marks, is somewhat shining, and bears a rather coarse sculpture, which looked at from behind seems like series of coarse punctures, but viewed laterally has more the appearance of coarse striæ with large punctures. The pygidium is snow-white, with a small bare spot at each side near the apex.

Two males and a female have been received, and one of the former is figured. The species was ticketed *B. albomaculatus*, Chevr., in Sallé's collection; this name is, however, already in use for another species.

113. **Bruchus reticulatus.**

Rufo-niger; capite cum antennis nigro, elytris lineis abbreviatis niveo-pubescentibus; corpore subtus pygidioque niveo-squamosis, coxis posterioribus nudis nitidis; elytris sutura basique nigris, sulcatis, sulcis sculpturatis, interstitiis angustis; tibiis posterioribus longius mucronatis.

Long. 3 millim.

Hab. Panama, Bugaba 800 to 1500 feet (*Champion*).

Only a simple example of the female sex has been obtained. It appears to be closely allied to *B. leucospilus*, but the rufescent colour of the surface becomes here and there black, and the sculpture of the elytra is different, consisting of broad grooves, separated by narrow interstices, the grooves being sculptured with very coarse punctures, and

having a little the appearance of being reticulate. The pygidium is immaculate. The punctures on the hind coxæ are remarkably coarse. The white marks on the elytra are not very conspicuous, and consist of a fine scanty pubescence; they are placed along the base and suture, and there is one mark on each elytron towards the extremity.

114. **Bruchus excellens.**

Brevis, niger; abdomine rufo, subtus niveo-squamoso; prothorace fortiter punctato, basi undulatim albido marginato; elytris sulcatis, sulcis sculpturatis, interstitiis angustis, sutura ad medium albido plagiata; pygidio niveo-squamoso, ad latera et transversim ante medium nudo; tibiis posterioribus acute sat longe mucronatis.

Long. $2\frac{1}{3}$ millim.

Hab. PANAMA, Bugaba (*Champion*).

A single female only has been received of this species. It is allied to *B. reticulatus*, but with numerous colour distinctions. The antennæ are broad, pectinate-serrate. The eyes are rather strongly prominent. The thorax is coarsely punctate, black with a line of white pubescence extending along the sinuous base, becoming indistinct externally. Elytra deep black, with a faint line of white pubescence along the suture at the base, and touching this, a more distinct white dash about the middle of the first groove; sculptured by broad, deep grooves, separated by linear interstices. Pygidium red at each side, densely covered with white pubescence along the middle, this pubescence divided into two patches by a transverse bare space above the middle. Legs black; hind tibia at the apex with an acute moderately long spine.

115. **Bruchus porosus.**

Fuscus, griseo marmoratus; antennis pedibusque anterioribus testaceis; prothorace crebre fortiterque punctato; elytris seriatim profunde punctatis; antennis (feminæ?) intus serratis.

Long. $2\frac{1}{2}$ millim.

Hab. GUATEMALA, Calderas 6000 feet (*Champion*).

Antennæ becoming broader from the fourth to the eighth joint. Head with very prominent eyes. Thorax short, strongly narrowed in front; surface slightly uneven, but without distinct sulcation, opaque, of a dark fuscous colour, with slender markings of griseous or pallid fuscous pubescence, allowing the coarse punctures to be discriminated. Elytra dark fuscous in colour, but largely covered with dense pubescence of a pallid fawn colour, distributed so as to give a marbled appearance, with rows of deep pore-like punctures, and with the interstices a little uneven. Pygidium covered with pallid pubescence like the elytra, but with some indefinite darker spots, and with the deep punctuation visible though much covered by the pubescence. Hind tibia with a distinct not elongate mucro.

Of this species only a single example, in a poor state of preservation, has been obtained. It is apparently a female, and has the antennæ less clavate than the corre-

sponding sex of *B. impiger*. It has no very salient character, but is not apparently closely allied to any other species, and may be distinguished by the coarse punctuation of the thorax, and the porous-like punctures on the pygidium.

116. **Bruchus umbraculatus.**

Kytorhinus umbraculatus, Motsch. Bull. Mosc. 1873, ii. p. 207 [1].

Hab. PANAMA [1].

It is impossible to form any opinion as to this description, but as Motschoulsky's other "Kytorhini" belong perhaps to this section, and as he states the femora to be unarmed, I place it here. He records it as found in the seeds of a Convolvulus on the Isthmus of Panama, in March, and it may probably be a species of which I have not seen specimens.

§ 8. *Species not identified, their position quite uncertain.*

117. **Bruchus oculatus.**

Bruchus oculatus, Say, North Am. Curc. p. 2 [1]; Lec. Say's Am. Ent. i. p. 260.

Hab. MEXICO [1].

118. **Bruchus triangularis.**

Bruchus triangularis, Say, North Am. Curc. p. 1 [1]; Lec. Say's Am. Ent. i. p. 259.

Hab. MEXICO [1].

It is not probable that these two species of Say's will ever be identified; *B. triangularis* is, however, described as having the elytra marked in a manner I have not seen in any of the species we have received.

119. **Bruchus lapsanæ.**

Bruchus lapsanæ, Motsch. Bull. Mosc. 1873, ii. p. 235 [1].

Hab. PANAMA "in sem. Lapsanæ" [1].

In this species the femora are said to be unarmed, and the length $\frac{3}{4}$ lin.

120. **Bruchus punctatostriatus.**

Bruchus punctatostriatus, Motsch. Bull. Mosc. 1873, ii. p. 227 [1].

Hab. PANAMA [1].

121. **Bruchus rufomaculatus.**

Bruchus rufomaculatus, Motsch. Bull. Mosc. 1873, ii. p. 222 [1].

Hab. PANAMA [1].

122. **Bruchus tantillus.**

Bruchus tantillus, Motsch. Et. Ent. vii. p. 98[1]; Bull. Mosc. 1873, ii. p. 216[2].

Hab. PANAMA [1] [2].

There is no description of this insect in the 'Etudes,' but merely a comparison with a new species from Burmah, and in the Bull. Mosc. it is briefly characterized in tabular form; it is probably near to *B. pusillimus*, but the scanty characters mentioned do not accord altogether therewith.

SPERMOPHAGUS.

Spermophagus, Schönherr, Curc. i. p. 102.
Zabrotes, Horn, Tr. Am. Ent. Soc. xii. 1885, p. 156.

This is a widely distributed genus, its largest and finest forms being found in the New World. The species are readily distinguished by their possessing two articulated spurs on the hind tibia. Dr. Horn (*loc. sup. cit.*) has recently separated some of the North American species under the name of *Zabrotes*, but this step appears premature. The type of *Spermophagus* is *S. titivilitius*, Boh. Dr. Horn, however, differentiates his *Zabrotes* not from this form, but from *S. robiniæ*, Fabr., but I think it possible from the description of *S. titivilitius* that it may prove to be structurally more similar to Dr. Horn's *Zabrotes* than to *Spermophagus robiniæ*. The minor structural characters in the Bruchidæ are remarkably variable, and the separation of the front coxæ is one of the most variable characters in the family. Another character relied on by the talented American Coleopterist to differentiate the genus from *Spermophagus*, I am not able to confirm; he speaks of the claws as absolutely simple, but in the species of our fauna which I refer with very little doubt to *Zabrotes*, I find that though the claws are minute, yet they are lobed at the base, much as in other Bruchidæ. At present, therefore, the genus can only be accepted as a section of *Spermophagus* containing the European *S. cardui*, and other Eastern forms in addition to the New World species for which it was instituted.

§ 1. *Front coxæ quite contiguous at the tip.* (Zabrotes.)

1. **Spermophagus pectoralis.**

Breviter ovalis, parum convexus; pygidio corporeque subtus griseo-pubescentibus; prothorace elytrisque plus minusve vage griseo guttatis; antennis elongatis, gracilibus, subserratis, articulis primo et secundo rufis; pectore medio concavo denseque griseo-pubescente.

Long. 2–2$\frac{1}{4}$ millim.

Hab. MEXICO, Campêche (*Sallé*); GUATEMALA (*Sallé*), near the city, Dueñas, Zapote, Capetillo, Calderas, San Gerónimo (*Champion*); NICARAGUA, Chinandega (*Sallé*), Chontales (*Janson*); PANAMA, Volcan de Chiriqui 3000 to 4000 feet (*Champion*).

Of very short form, broadest behind. Antennæ long and slender, as long as the thorax and elytra together; second joint more than half as long as the third; joints 5–10 each slender, but with acute inner apical angle. Head and eyes small, the latter minutely facetted. Thorax very short, the sides narrowed and rounded in front, the base oblique

on each side, the surface only minutely sculptured, the sculpture concealed by the fine pubescence, which is black, varied with indistinct grey patches, the most conspicuous of which is an angular mark in front of the scutellum. Elytra short and broad, finely striate, black, more or less variegate with grey pubescence; this sometimes forms a distinct mark on the middle of each side. Pygidium extremely broad, more or less covered with grey pubescence, and with a more condensed line of such pubescence along the middle. Under-surface more uniformly covered with grey pubescence; the hind coxæ bare, with only a few obsolete punctures; the middle of the metasternum in front distinctly depressed, and with a greater condensation of the pubescence in the depression.

This species is very variable in the markings of the upper surface; specimens nearly evenly covered with grey pubescence were labelled "*Bruchus leucogaster*, Kunze" in Sallé's collection, and other individuals where the black predominates, allowing a single incomplete pale fascia to be seen, "*B. cingulatus*, Kunze." The majority of the examples obtained have a number of indefinite oblong griseous marks forming two or three irregular transverse series on the wing-cases. *S. semifasciatus*, Schönh., is no doubt closely allied to the present species, and an example from Guatemala bearing this name is extant in our National collection. Schönherr's locality for *S. semifasciatus* is, however, Barthélemy, and his description does not agree sufficiently with our insect to admit of its being treated as his species. The North American species of *Zabrotes*, described by Dr. Horn, appear also to be very close to *S. pectoralis*, but are described as possessing more or less coarse punctuation on the thorax.

2. **Spermophagus propinquus.** (Tab. XXVI. fig. 20.)

Breviter ovalis, parum convexus, nigerrimus; elytris albido semifasciatis, prothorace pygidioque medio pallido-pubescentibus, corpore subtus albido-pubescente; antennis gracilibus, articulis primo et secundo rufis.
Long. 2 millim.

Hab. GUATEMALA, Zapote, Dueñas, Capetillo (*Champion*); PANAMA, Volcan de Chiriqui between 2500 and 4000 feet, Tolé (*Champion*).

This species is extremely similar to the semifasciate form of *S. pectoralis*, but has no trace of the pectoral depression, and the marks on the upper surface and pygidium, though few in number, are very definite on the intense black ground; the form, moreover, is rather shorter and the antennæ are not quite so elongate.

Only six examples have been obtained. Probably the species varies somewhat in the markings, as two of the specimens do not possess the white mark on the wing-cases; but this is possibly due to abrasion.

§ 2. *Front coxæ more or less separated.*

3. **Spermophagus gravidus.**

Piceus, pubescentia griseo-ochracea æqualiter vestitus; antennis pedibusque rufis; oculis convexis, distantibus, fortiter granulatis; prothorace fortiter punctato; elytris profunde striatis.
Long. 9–11 millim. (cum capite).

Hab. Mexico, Almolonga, Jalapa (*Höge*); Guatemala, San Gerónimo, San Joaquin, Mirandilla (*Champion*).

Antennæ entirely red, feebly serrate from the fourth joint outwards. Eyes at their front margin separated by a space about as long as the first joint of the antennæ. Thorax transverse, the sides rounded and narrowed in front, nearly straight behind, the hind angles obtuse, the surface evenly covered with deep and coarse rather distant punctures, and with a minute punctuation besides, the latter concealed by the rather abundant pubescence. Scutellum elongate, parallel-sided, with a small acumen in the middle behind. Elytra elongate, rather deeply striate, the striæ crenate; pubescence uniform, quite without spots; each stria has on the interstice on each side of it a series of fine punctures, each puncture bearing a short fine hair. Pygidium clothed like the elytra, and with a line of more condensed pubescence along the middle.

In the male the antennæ are a little longer than they are in the female. This is the only sexual distinction I can detect.

4. **Spermophagus dispar.** (Tab. XXVI. fig. 21.)

Elongato-ovalis, piceus, pubescentia griseo-ochracea æqualiter vestitus; antennis pedibusque rufis; oculis convexis, parum distantibus, fortiter granulatis; prothorace fortiter punctato; elytris profunde striatis.
Long. 7–9 millim.

Hab. Panama, Bugaba, David, Caldera in Chiriqui, San Lorenzo (*Champion*).

This species is very similar to *S. gravidus*, but is smaller and less convex, with greater discrepancy between the sexes, and readily distinguished by the smaller space separating the eyes; in this last respect there is a sexual difference, the male having the eyes rather larger, so that in this sex the interocular space in front is only about as broad as the second joint of the antennæ, while in the female it is slightly greater; the antennæ of the male are a good deal longer, and the inner apical angle of joints 4–10 more acute than in the female. In each sex the second and third joints of the antennæ are rather shorter and stouter than they are in *S. gravidus*, and the punctuation on the interstices and the pubescence arising from it are less, and the striæ are rather finer.

Mr. Champion secured a series of about twelve examples at Caldera, eight at David, and one or two at each of the other localities.

5. **Spermophagus lineolatus.**

Spermophagus lineolatus, Motsch. Bull. Mosc. 1873, ii. p. 248 [1].

Hab. Guatemala, San Joaquin, San Gerónimo (*Champion*); Nicaragua [1]; Panama, Bugaba (*Champion*).

Mr. Champion found only one example in each locality, and it is by no means certain that they belong to the species Motschoulsky described, or even that these examples are themselves conspecific, though the differences are only in the size, and the details of

colour and punctuation; Motschoulsky leaves it to be inferred that the antennæ of his species are black, except at the base, and this is not the case in the two examples found by Mr. Champion. These individuals appertain to a species closely allied to *S. dispar*, but are not so large, and have the pubescence arranged so as to form somewhat indistinct lines on the thorax and elytra, and the eyes more widely separated.

6. **Spermophagus pollens.**

Major, latus, niger, supra brunneus, fulvo-pubescens; prothorace sparsim fortiter punctato, elytris profunde striatis.
Long. 10 millim.

Hab. British Honduras, Belize (*Blancaneaux*).

Antennæ black, feebly serrate internally. Eyes rather widely separated. Thorax rather short, its sides a little curved, greatly narrowed from the base to the front, the rather coarse punctuation not quite regularly distributed and greatly concealed by the abundant pubescence. Scutellum oblong, rather broad, only indistinctly pointed. Elytra with deep striæ, which are rather closely punctate, and without hairs. Pygidium concolorous with the upper surface; under-surface and legs black, rendered grisescent by pubescence. Outer spur of the hind tibia very elongate.

Although only one example has been received, this is pretty certainly a quite distinct species; the black under-surface, and tawny red upper surface quite without variegation are peculiar to it. The form of the apex of the scutellum is not quite clear to me, owing to the pubescence, but I think it is certainly not tricuspid.

7. **Spermophagus obductus.**

Piceus (prothorace elytrisque brunneis), fulvo-pubescens; prothorace utrinque fortiter punctato; scutello oblongo, apice tricuspidato; pygidio concolore.
Long. 6–7 millim.

Hab. Panama, Volcan de Chiriqui 2000 to 3000 feet, San Feliz (*Champion*).

Antennæ piceous, feebly serrate. Eyes large, coarsely granulated, rather widely separated in front. Thorax rather elongate, greatly narrowed in front, the surface densely, finely punctured, with larger punctures which are not present on the middle. Scutellum moderately long and broad, evidently tricuspid behind, with the intermediate tooth the longer. Elytra elongate, rather deeply striate, the striæ only obscurely crenate. Pygidium nearly concolorous with the elytra, with a fine line of rather denser ochreous pubescence along the middle. Under-surface blackish, hind body paler.

This species, of which I have only seen two examples, is readily distinguished from *S. dispar* by the more conical thorax, with diminished coarse sculpture on the middle.

8. **Spermophagus obscurus.**

Ovalis, nigro-fuscus, supra brunneus, ochraceo-pubescens, haud variegatus; prothorace transverso, tantum ad

latera punctis majoribus impressis ; scutello breviore, subobtuso ; pygidio medio linea pubescentiæ ochraceæ parum conspicua.
Long. 6 millim.

Hab. MEXICO, Vera Cruz, Toxpam (*Sallé*) ; BRITISH HONDURAS, Belize, R. Hondo (*Blancaneaux*) ; GUATEMALA, Zapote (*Champion*) ; PANAMA, Bugaba (*Champion*).

Antennæ moderately long, only obscurely serrate, obscure black, the two basal joints obscure red, more or less infuscate. Eyes large, coarsely granulate, separated in front by a space about as broad as the lengths of the second and third joints of the antennæ together. Thorax strongly transverse, the sides greatly narrowed in front, much rounded, the surface closely and very minutely punctulate, on the outer portions with larger punctures, but all the sculpture much obscured by the rather rough pubescence. Elytra elongate, rather deeply striate, the striæ finely and indistinctly crenate, the interstices slightly convex, some of them very slightly more elevated behind, the pubescence like that of the thorax, not variegate. Pygidium of the dull black colour of the undersurface, with a fuscous and ochraceous pubescence, and with a denser line of the latter colour along the middle. Front coxæ separated only by a slender process of the prosternum ; metasternum in the middle in front more than usually prominent.

This is an obscure-looking insect, readily distinguished from its allies by the much diminished separation of the front coxæ. Only eight examples have been obtained. The species was labelled *Bruchus hoffmanseggi*, Schönh., in Sallé's collection, and it is possible it may prove to be that species ; but I think the probability is in the other direction, *S. hoffmanseggi* being a Brazilian insect. (Schönherr's record of this latter species as North American as well as Brazilian is probably erroneous, especially as it appears to have been made only on indirect evidence.)

9. **Spermophagus togatus.**

Elongato-ovalis, piceus, ochraceo vestitus ; antennis pedibusque rufis, pubescentia ochracea in elytrorum interstitiis alternis magis condensata, hic inde subinterrupta ; prothorace transverso, sparsim sat fortiter punctato ; scutello sat elongato.
Long. 5–6 millim.

Hab. GUATEMALA, Capetillo (*Champion*).

The coarse punctuation on the thorax is scanty and not so conspicuous as in other species ; but it is not absent from the disc. The rough yellow pubescence of the wing-cases is a good deal thicker on the interstices, and here and there is vaguely interrupted so as to divide it indistinctly into elongate patches. The front coxæ are separated by a moderately broad process, which has an obtuse apex, this being received on the mesosternum considerably above the lower level of the latter. The middle coxæ and the hind legs are infuscate.

Though very similar to *S. obscurus* this species is distinguished by numerous characters, among which the difference in the separation of the front coxæ is most important. Only two examples have been met with.

10. **Spermophagus spectabilis.**

Ovalis, fusco-niger, griseo vestitus; prothorace elytrisque fusco ochraceoque variegatis, antennis pedibusque fuscis; prothorace in medio absque punctis majoribus; scutello sat elongato; elytris subtilius striatis.
Leng. 6 millim.

Hab. PANAMA, Volcan de Chiriqui 2500 to 4000 feet (*Champion*).

Thorax very strongly transverse, with three small spots of yellow pubescence on either side; the larger punctures conspicuous at the sides, but absent along the middle. Elytra vaguely variegate, there being on some of the interstices a development of ochraceous pubescence, which does not form, however, distinct spots or definite patches. Pygidium variegate with ochreous and fuscous. Under-surface unicolorous, grisescent, except for a spot of ochreous pubescence on the side of the first ventral ring, and smaller and more indistinct spots on the following rings.

Although closely allied to *S. togatus* this species is probably distinct; it is broader and has the front coxæ rather more widely separated, the thorax maculate, without any coarse punctuation on the middle, and the wing-cases with much less ochreous pubescence. Only one example has been received.

11. **Spermophagus leporinus.**

Ovalis, fusco-niger, griseo pubescens; superne guttulis minutis albidis ornatis; antennis pedibusque rufis; prothorace fortiter transverso, tantum ad latera punctis majoribus impressis; scutello parum elongato; elytris subtilius striatis.
Long. 5 millim.

Hab. GUATEMALA, San Gerónimo (*Champion*); PANAMA, Taboga Island (*Champion*).

Another close ally of *S. togatus*, but readily distinguished by the small white dots existing on the upper surface; there are three of these, but only indistinct, on each side of the thorax; on the alternate interstices of the elytra they are more numerous and distinct; the pubescence of the upper surface is of a uniform griseous colour, except for the white spots, and the fact that behind some of the white dots on the elytra the surface is indistinctly darker. The middle of the thorax is without coarse punctuation, and the sides only are indistinctly punctured. The pygidium is rather sparingly and irregularly clothed with grisescent pubescence. The structure of the prosternum differs slightly from that of *S. togatus*, it being less constricted at the apex of the coxæ, and a little more prolonged behind: the metasternum is not all prominent in the middle in front.

One example from each locality.

12. **Spermophagus luctuosus.**

Ovalis, fusco-niger, minus dense griseo vestitus, ochraceo guttatus; antennis pedibusque rufis; prothorace valde transverso, ubique fortiter punctato.
Long. 4½ millim.

Hab. GUATEMALA, Zapote (*Champion*); PANAMA, Caldera in Chiriqui (*Champion*).

Antennæ rather slender, distinctly serrate internally. Eyes moderately large, rather widely separated. Thorax very short, convex, greatly rounded in front, evenly covered with coarse somewhat distant punctures (in addition to the minute punctuation), with griseous pubescence, and a very obscure ochreous spot on either side of the middle. Scutellum rather short and broad. Elytra finely striate, the striæ distinctly crenate, covered with scanty griseous pubescence, on the alternate interstices with numerous ochreous spots, more distinct behind than at the base. Pygidium dark, somewhat sparingly griseo-ochraceo-pubescent, and with a fine line of such pubescence along the middle. Under-surface uniformly griseo-pubescent; front legs obscure red, the hind legs darker. Front coxæ moderately separated, the process not constricted, slightly prolonged, touching the mesosternum slightly above the lower level of the latter.

Closely allied to *S. leporinus*, but readily distinguished from that species by the thoracic punctuation, and the different coloration of the upper surface.

One example from each locality.

13. **Spermophagus perfectus.**

Elongato-ovalis, fusco-niger, griseo pubescens, vix maculatus; antennis pedibusque rufis; prothorace conico-transverso, medio absque punctis majoribus.
Long. $5\frac{1}{2}$ millim.

Hab. Mexico, Tehuantepec (*Sallé*).

Antennæ slender, entirely red. Eyes coarsely granulate, moderately separated. Thorax rounded at the sides and greatly narrowed towards the front, evenly covered with griseous pubescence, which conceals the sculpture; there is, however, no coarse punctuation along the middle, and at the sides it is only obscure. Scutellum oblong, rather short. Elytra very finely striate, the striæ not distinctly punctured, and greatly concealed by the nearly uniform griseous pubescence, on which are a few irregularly placed minute fuscous spots. Pygidium pale red, with pubescence like that of the elytra. Legs red, the hind ones darker. Front coxæ rather widely separated, the process distinctly prolonged to form a short broad termination received on the apex of the mesosternum exactly at the level of its junction with the metasternum, so that in fact the apex of the process almost touches the metasternum between the middle legs.

Although very similar to *S. togatus* this species is readily distinguished by the sternal characters; it is, too, more uniform in its colour, and has a longer thorax. Only one example has been received.

14. **Spermophagus trisignatus.**

Ovalis, fusco-niger, ochraceo pubescens, vage subvariegatus; antennis pedibusque rufis; prothorace transverso, medio absque punctis majoribus; pygidio ad angulos superiores, et in medio versus apicem fusco-trisignato.
Long. 4–5 millim.

Hab. Mexico, Playa Vicente (*Sallé*); British Honduras, R. Sarstoon, R. Hondo

(*Blancaneaux*); GUATEMALA, Mirandilla, Cubilguitz (*Champion*); PANAMA, Boquete (*Champion*).

This species is very closely allied to *S. perfectus* but is of less elongate form, and the pygidium has a dark mark at each upper angle, and a more variable one towards the extremity: the sternal structure is almost the same as in *S. perfectus*.

Six examples.

15. **Spermophagus geminatus.**

Ovalis, piceus, minus dense griseo pubescens, superne guttulis albidis minutis ornatus; antennis pedibusque rufis; prothorace dense punctulato, ad latera punctis majoribus adjectis.
Long. $3\frac{1}{2}$ millim.

Hab. PANAMA, Tolé (*Champion*).

This species is very similar to *S. leporinus* though much smaller; the antennæ are comparatively short, and the eyes are smaller; but it is readily distinguished by the sternal structure, the prosternal process touching the mesosternum a little nearer the apex of the latter, and the prosternum is comparatively shorter and rather broader. There is no line along the middle of the pygidium, which is concolorous with the elytra.

Only one example has been found.

16. **Spermophagus rufulus.**

Ovalis, rufulus, griseo pubescens, elytris submaculatis; prothoracis medio absque punctis majoribus; scutello minuto.
Long. $3\frac{3}{4}$ millim.

Hab. GUATEMALA, Teleman in the Polochic valley (*Champion*).

Antennæ pale red, rather short, the penultimate joint about as long as broad. Eyes moderately large, coarsely granulated. Thorax moderately transverse, densely minutely punctured, with larger, but still not conspicuous, punctures on the lateral portions. Elytra clothed with pallid pubescence, indistinctly variegate with fuscous spots. Pygidium pale red, clothed with pallid pubescence, unimaculate.

The sternal structure is almost the same as in *S. geminatus*, the short prosternal process being received by the prosternum near, but not quite at, its lower part. It is possible that the minute condition of the scutellum is due to its being partly concealed as the result of some abnormal development of the adjacent portions of the elytra; but even if this be the case, the different colour and the absence of white spots would prevent the insect being considered that species. It has a good deal of resemblance also to *S. scutellaris*, and it is possible the scutellum may naturally be similar to what exists in that species; still the prosternum in *S rufulus* is so much more largely developed between the coxæ that the two cannot be considered as allied.

17. **Spermophagus dytiscinus.** (Tab. XXVI. fig. 22.)

Ovalis, convexus, fuscus ; minus dense griseo pubescens, ochraceo guttatus ; prothorace valde transverso, ubique fortiter punctato ; prosterni processu elongato, acuminato.
Long. 4 millim.

Hab. BRITISH HONDURAS, Belize (*Blancaneaux*); GUATEMALA, Chacoj in the Polochic valley (*Champion*).

Antennæ rather short, red; eyes only moderately large, coarsely facetted, widely separated in front. Thorax very short, rounded and narrowed at the sides in front, furnished in addition to the minute punctuation with larger punctures which exist on the middle as well as at the sides, covered with a rather scanty griseous pubescence, and some indefinite ochraceous spots. Elytra rather deeply striate, the striæ at the base distinctly crenate, the alternate interstices with rather numerous spots of ochraceous pubescence. Pygidium concolorous with the elytra, not spotted. Front coxæ rather widely separated, terminating behind as a sharp spine projecting on the apex of the metasternum, somewhat after the fashion normal in the family Dytiscidæ.

Only four examples were met with. The species bears an excessive resemblance to *S. luctuosus*, from which it is perfectly distinguished by the prosternal process.

18. **Spermophagus scutellaris.**

Ovalis, angustulus, rufo-testaceus, griseo pubescens, sæpius circa scutellum plaga magna fuscula; elytris vage minuteque fusco subguttatis ; pygidio medio longitudinaliter vage fusco signato.
Long. $3\frac{1}{2}$ millim.

Hab. GUATEMALA, near the city, Capetillo, Dueñas, Zapote, Cerro Zunil (*Champion*); NICARAGUA, Chontales (*Janson*); PANAMA, Bugaba (*Champion*).

Antennæ rather feeble, yellow, the second joint about equal to the third. Head with moderately large, convex, coarsely facetted eyes. Thorax strongly transverse, very densely and minutely punctured, finely griseo-pubescent, not spotted, with very faint indications of larger punctures at the sides. Elytra very finely striate; pygidium concolorous with the elytra, with a longitudinal and rather indefinite fuscous mark on the middle. Scutellum narrow, small.

S. scutellaris may readily be distinguished from the preceding species by the diminished size of the third joint of the antenna. The front coxæ are only slightly separated; the process is only slightly prolonged backwards behind them, and is received on the front of the mesosternum a little above its apex; the longer spur of the hind tibia is rather short. Mr. Champion secured ten examples at Capetillo ; but we have only one or two individuals from each of the other localities. All the examples from Guatemala have an irregular triangular dark mark round the scutellum; this is much reduced in size in the two exponents from Nicaragua, and is completely absent in the unique example from Bugaba.

19. **Spermophagus centralis.** (Tab. XXVI. fig. 23.)

Ovalis, fusco-ferrugineus, griseo vestitus, vage albido maculatus; antennis rufis; prothorace subtilissime punc-

tato, ad latera punctis majoribus adjectis; scutello oblongo, apice tricuspidato; pygidio macula magna fusca griseo-marginata ornato.

Long. $5\frac{1}{2}$–$7\frac{1}{2}$ millim.

Hab. British Honduras, R. Hondo (*Blancaneaux*); Guatemala, San Gerónimo, Chacoj in the Polochic valley (*Champion*); Panama, Caldera, Volcan de Chiriqui 2500 to 4000 feet, Bugabà (*Champion*).

Antennæ ferruginous, feebly serrate; third joint twice as long as the second, the tenth a little longer than broad. Head broad; eyes large, very coarsely facetted, only moderately distant in front. Thorax strongly transverse, moderately narrowed in front, the front margin broader and less rounded than usual, the surface very densely and finely punctured, with some larger punctures at the sides, covered with fine griseous pubescence, and sprinkled with a few minute white marks. Elytra ferruginous, more or less infuscate, and with some black marks, covered with a very fine pubescence of a griseous colour, more or less marbled with white. Pygidium nearly entirely occupied by a large oval mark of dark fuscous colour, a little darker above, and surrounded by dense pallid pubescence. Inner carina of the hind margin of the posterior femur distinctly emarginate at the extremity. Front coxæ widely separated, the prosternal process short, received into a definite cavity at the apex of the mesosternum. This species agrees in many respects with Gyllenhal's description of *S. cistelinus*, but not with examples from Cuba so named by Jekel in our national collection at Kensington.

20. **Spermophagus marmoratus.** (Tab. XXVI. fig. 24*.)

Latior, ovalis, niger, griseo testaceoque marmoratus, prothorace elytrisque testaceis nigro marmoratis; pygidio macula magna ovali fusco-brunnea notato.

Long. 7 millim.

Hab. Mexico (*Sallé*); Panama, Volcan de Chiriqui, Bugaba (*Champion*).

Head black, broad and short; eyes moderately large, finely facetted, widely separated. Antennæ black, moderately broad, feebly serrate, the tenth joint rather longer than broad. Thorax transverse conical, pale, without distinct punctuation, densely pallid-pubescent, with some indistinct fuscous nebulosities near the front, the surface depressed in front of the scutellum; this latter oblong, rather short, rounded behind. Elytra similar in colour to the thorax, densely pubescent, so that the striation is quite indistinct, on the apical half largely marked with black in an irregular manner. The large pygidial mark is formed of dense pubescence, and is so shaded that when looked at from behind it has the appearance of a cavity extending to the interior of the insect. Front and middle legs yellow; hind femora black, yellowish at the apex, the tibiæ variegate.

This is a remarkably distinct species: the prosternum widely separates the front legs,

* On our Plate the numbers of the figure of this species and of *S. irroratus* are erroneously given as 25 and 26 instead of 24 and 25 respectively, though correctly given below.

and is margined at the sides; its process is received into a cavity on the lower face of the mesosternum, separated by a considerable space from the metasternum.

Six examples were met with. The unique Mexican exponent is in an extremely dirty state, and is apparently a variety of narrower and more elongate form, with the marmorations of the wing-cases extending more to the front.

21. **Spermophagus pictus.**

Ovalis, ochraceo fuscoque variegatus; antennis basi pedibusque rufis, illis extrorsum nigris; scutello angusto, elongato.
Long. 5 millim.

Hab. MEXICO, Vera Cruz (*Sallé*).

This is a very distinct species, readily distinguished by the elytra and pygidium being covered with numerous and very distinct marks, arranged quite irregularly, of dark chocolate and griseo-ochraceous colours. The eyes are small, but prominent and moderately coarsely facetted; the penultimate joints of the antennæ are transverse. The thorax is strongly transverse, and has no coarse punctuation on the middle; there are some coarse punctures, much obscured by the clothing, at the sides; the surface is variegate with colours similar to those of the elytra, but the spots are not so sharply defined. The scutellum is remarkably narrow and elongate. The front coxæ are not very widely separated; the prosternal process projects scarcely at all backwards, and is received on the anterior face of the mesosternum considerably above its lowest point.

One example.

22. **Spermophagus barcenæ.**

Bruchus barcenæ, Dugès, Ann. Soc. Ent. Belg. xxiv. p. 37, t. 1 [1].

Hab. MEXICO, Guanajuato [1] (*Sallé*).

The metamorphoses of this insect, which feeds in the seeds of *Barcena guanajuatensis*, have been described and figured as above by Dr. Eug. Dugès.

23. **Spermophagus irroratus.** (Tab. XXVI. fig. 25.)

Breviter ovalis, convexus, fusco-niger vel fusco-rufus, confertim griseo irroratus; antennis basi testacea; capite angustulo, oculis nullo modo convexis, subtiliter granulatis.
Long. 4–4½ millim.

Hab. GUATEMALA, Tocoy (*Champion*); PANAMA, Bugaba, Caldera, Volcan de Chiriqui (*Champion*).

Antennæ rather short and broad, the second and third joints subequal, each rather longer than the fourth joint, the penultimate joints transverse. Thorax rather elongate, convex, much curved at the sides and narrowed in front, the sculpture quite obscured by the dense clothing. Scutellum short and broad, subquadrate. Elytra not very long, scarcely three times as long as the thorax, extremely finely striate; black, irregularly irrorated with grey; the thorax variegate in a similar manner, so that the upper surface

has a very mottled appearance. Pygidium grey, mottled with black. Front coxæ moderately distant; prosternal process very short, received on the front of the mesosternum a little above the apex of the latter, which is not excavated for its reception.

This species is allied to *S. barcenæ* but is of a darker colour, and is readily identified by the quite flat eyes. Six examples have been found.

24. **Spermophagus planifemur.**

Spermophagus planifemur, Chevr. Ann. Soc. Ent. Fr. 1877, Bull. p. cxxxiv.[1]

Hab. Mexico (*Melly*)[1].

We have received nothing agreeing with this description. The eyes are said to be "minute reticulatis;" and this suggests that the species may be near *S. barcenæ* or *S. irroratus*.

25. **Spermophagus titivilitius.**

Spermophagus titivilitius, Boh. in Schönh. Curc. i. p. 136[1].

Hab. Mexico[1].

I regret that I have not been able to make the acquaintance of this species, which was designated by Schönherr as the type of *Spermophagus*. I cannot form any opinion as to its position, no special structural characters being alluded to in the description.

CARYOBORUS.

Bruchus (Grex B. *Caryoborus*), Schönherr, Curc. i. p. 92.
Caryoborus, Horn, Trans. Am. Ent. Soc. iv. (Jan. 1873), p. 312.
Bruchus (pars), Gemm. & Harold, Cat. x. p. 3219.

This genus may be retained, though it is not easy to differentiate it from *Bruchus* by any character that is quite invariable in the two genera. The separation of the front coxæ is of no avail, as some Eastern *Caryobori* have them contiguous. The thorax margined all round, and the peculiar structure of the femora, in conjunction with the elongate wing-cases, suffices to distinguish it. The femora are very broad and compressed, and terminate beneath as an edge quite without longitudinal groove or sulcation. A similar structure of the legs prevails in certain *Bruchi* of the Section "Pachymerus" (Group 1 huj. op.), but is accompanied there by a great abbreviation of the hind body and wing-cases. *C. chiriquensis* here described affords a fresh illustration of the difficulty of arranging the Bruchidæ in sharply-defined genera. Hitherto *Spermophagus* has been considered as quite satisfactorily distinguished from the other members of the family by its species possessing two articulated spurs on the hind tibia: the *Caryoborus* I am now speaking of is, however, provided with two small tibial spurs, though in other respects a typical member of the genus.

Caryoborus is a very widely-distributed genus; but the Eastern species are insignificant

in comparison with the very large forms found in South America and the Antilles. They are apparently rare insects, and our region no doubt possesses a greater number of species than we are able to record at present.

1. **Caryoborus rubidus.**

Caryoborus rubidus, Chevr. Ann. Soc. Ent. Fr. 1877, Bull. cxiv.[1]

Hab. Mexico, Tuxtla [1], Putla, Chiapas, Cosamaloapan (*Sallé*).

The examples we have received of this species are only five in number, and are in a bad state of preservation. They vary in colour and somewhat in punctuation, and there may possibly be more than one species among them; but this I find it impossible to decide. The darker examples come very near to *C. arthriticus*, Fabr.

2. **Caryoborus chiriquensis.** (Tab. XXVI. fig. 13.)

Fusco-rufus, olivaceo pruinosus; antennis fusco-nigris; prothorace valde transverso, parum punctato, lateribus sinuatis, angulis posterioribus minute acutis; elytris seriatim punctatis vix striatis.

Long. 8–10 millim.

Hab. Panama, Volcan de Chiriqui (*Champion*).

Antennæ elongate, serrate from the fourth joint outwards, the joints not impressed. Head with very large eyes, which are but little distant in front. Thorax sinuate at each side, so that the hind angles are slightly prominent and acute, with a few coarse punctures near each outside, and a divided patch on the middle. Elytra not striate, with rows of punctures which at the base are coarse. Pygidium slender, subacuminate. Front coxæ widely separated; hind femur with a series of very coarse denticulations placed on a raised margin, extending more than halfway towards the base, terminated by a longer tooth, the basal portion of the femur quite without serration or denticles.

Four examples were found of this distinct species. It will be readily identified by the greater development of the femoral serration; indeed, it may probably prove to be entitled to generic distinction, as the hind tibiæ possess at the extremity two minute articulated spurs.

3. **Caryoborus testaceus.**

Caryoborus testaceus, Motsch. Bull. Soc. Mosc. 1873, 2, p. 216 [1].

Hab. Nicaragua [1].

We have not received any *Caryoborus* corresponding with this description; the size given for it, viz. $2\frac{1}{2}$ lin., is too small for *C. rubidus*, to which in many other respects it appears to be similar.

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[Names in small capitals refer to Families &c.; those in roman type to the chief reference to each species included in the work; those in italics to species incidentally mentioned, synonyms, &c.]

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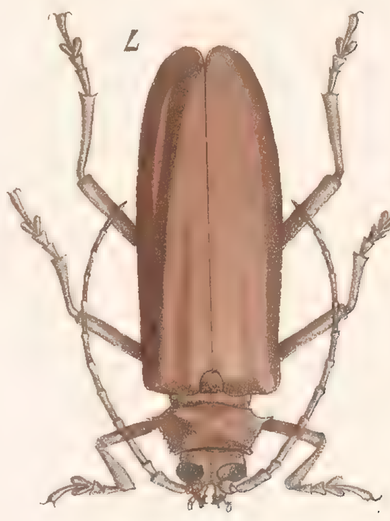
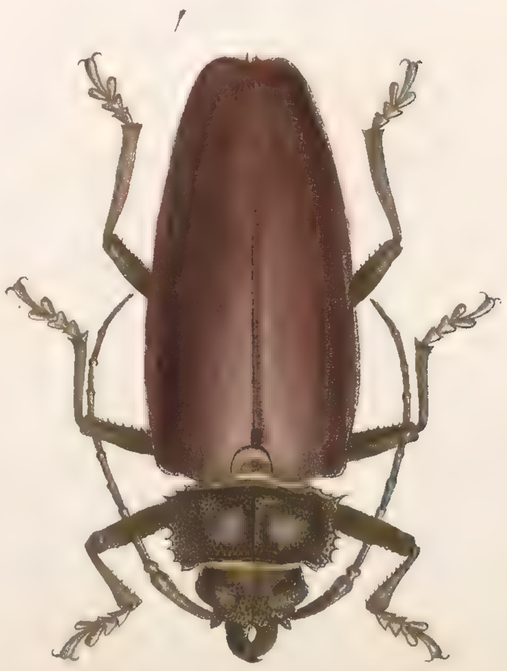
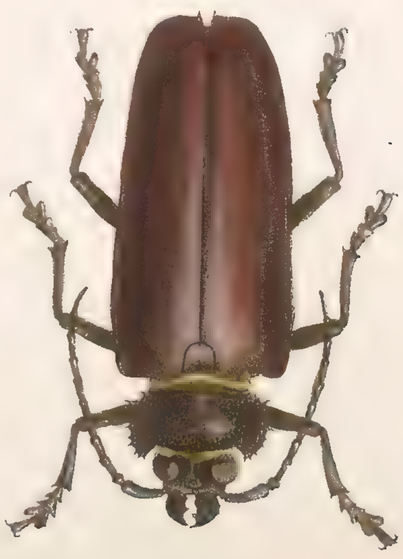
4 ♂, 5 ♀ DEROBRACHUS ASPERATUS.
6 ♂ MACRODONTIA DEJEANII.
7 ♀ STRONGYLASPIS SCOBINATUS
8 CALLIPOGON BARBATUM, *var.* ORNATUM.
9 ♂ DEROBRACHUS LONGICORNIS.
10 ♂ *major*, 11 ♂ *minor* MALLODON MOLARIUM.

W.Purkiss lith. Hanhart imp. 129







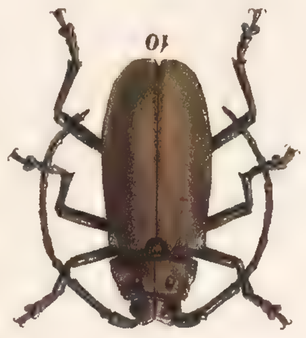
Coleoptera. Vol. 1. *Biol. Centr. Am.*

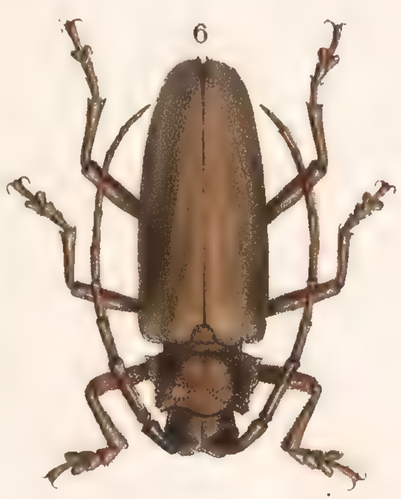
W. Purkiss. del. et lith.

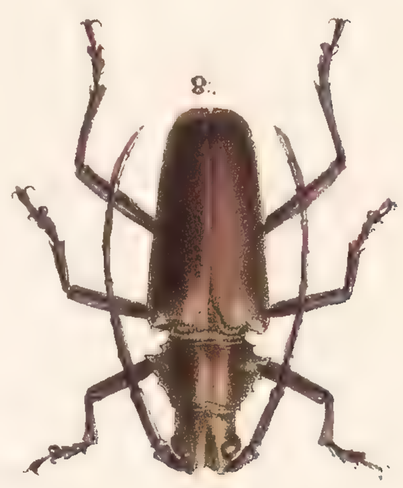
Hanhart. imp.
156

1♂. 2♀. 3♀. *var.* MALLASPIS BELTI.
4♂.5♀? " RHOMBODERA.
6♂. " PARADOXA.
7♂. " TRICHOSTETHA.
12 OTHEOSTETHUS MELANURUS.

8♂. MALLASPIS PRAECELLENS.
9♂. STRONGYLASPIS SCORINATUS
10. " BULLATUS
11. HOLONOTUS NIGROAENEUS.







Gust. Perty. Ann.

Coleoptera Tab. 2.

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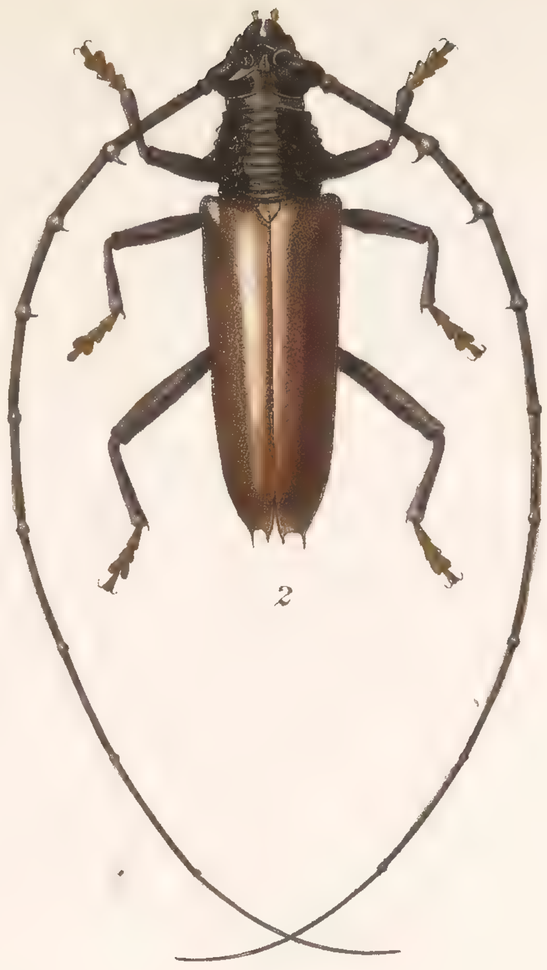
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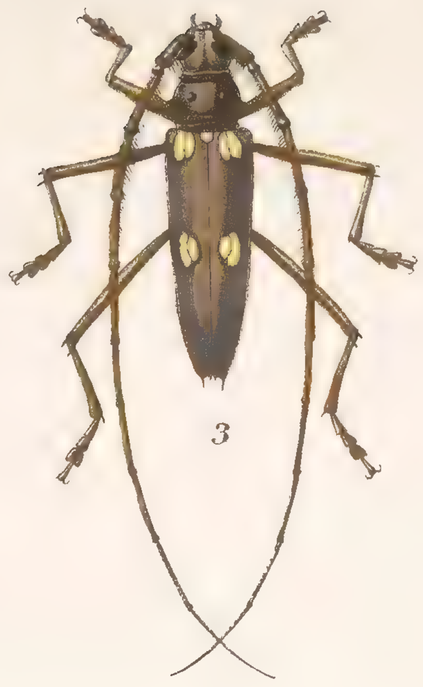
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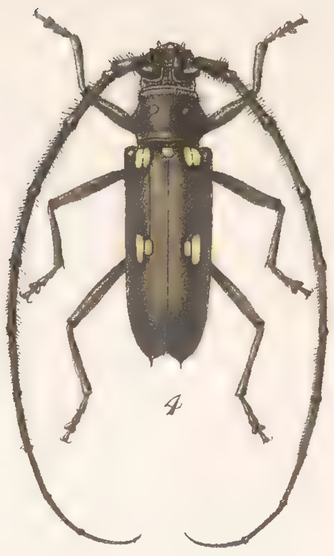
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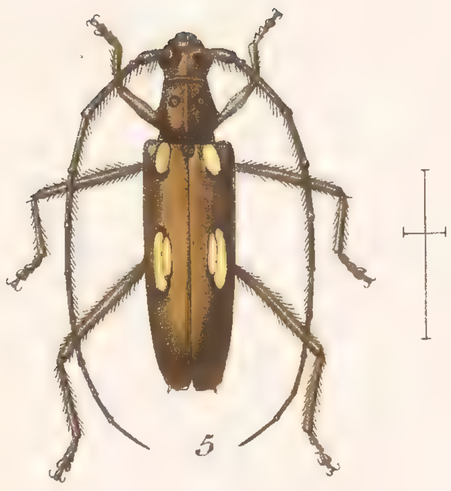
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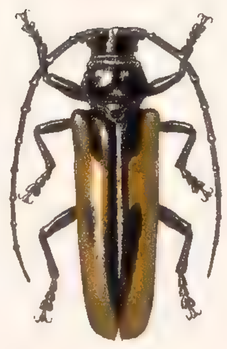
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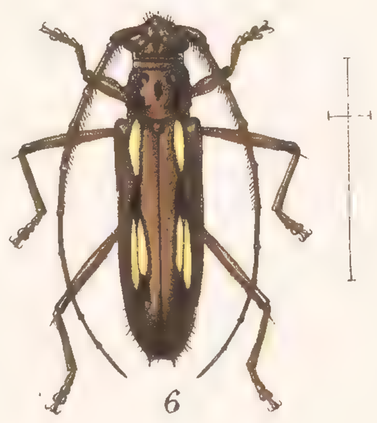
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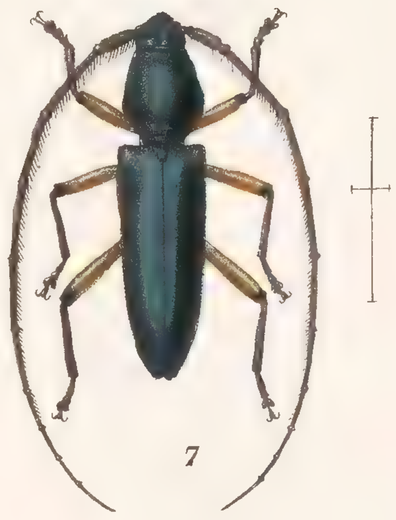
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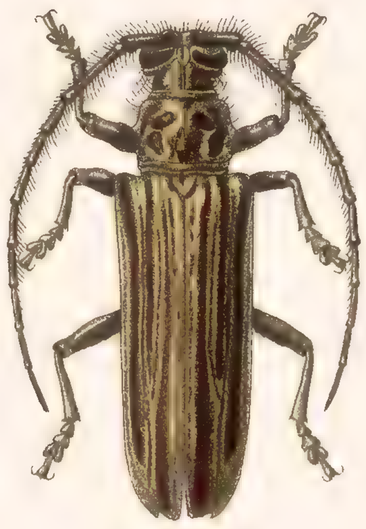
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1 STYLICEPS SERICATUS.
2 HAMMATICHERUS CASTANEUS.
3 EBURIA PEDESTRIS.
4 PANTOMALLUS FULIGINEUS.
5 EBURODACRYS CALLIXANTHA.
6 „ STICTICOLLIS.
7 TRISTACHYCERA VIRIDIS.
8 SPHALLENUM ROBUSTUM.
9 XESTIA SAGITTARIA.
10 „ PILOSOVITTATA.
11 „ NITIDA.
12 ELAPHIDION CORONATUM.
13 HYPERMALLUS SCABRICOLLIS.
14 „ DÆDALEUS.
15 NEPHALIUS XESTIOIDES
16 PERIBÆUM VILLOSULUM.
17 MALACOPTERUS LINEATUS.

W.Purkiss lith. Hanhart imp.

KODAK Color Control Patches © The Tiffen Company, 2000 Kodak LICENSED PRODUCT Blue Cyan Green Yellow Red Magenta White 3/Color Black Centimeters Inches

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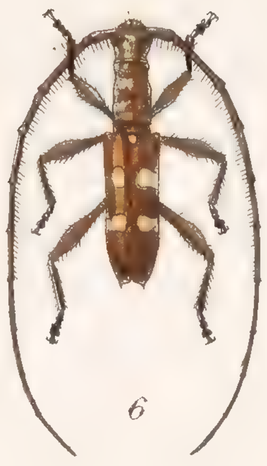
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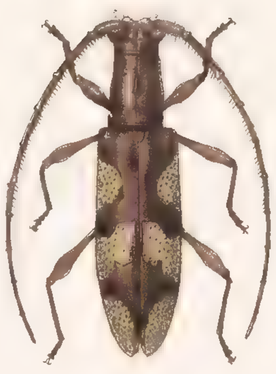
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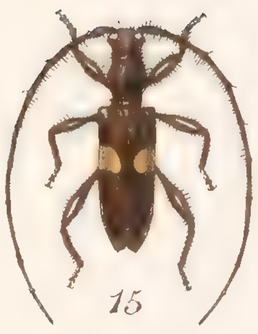
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1 MILTESTHUS MARGINATUS.
2 NEPHALIUS NIGRIVENTRIS.
3 IRONEUS DUPLEX.
4 MALLOCERA SPINICOLLIS.
5 HEXOPLON ALBIPENNE.
6 OCTOPLON GLABRIOLUM.
7 IBIDION CARINICOLLE.
8 „ OBTUSUM.
9 IBIDION NIGROCINCTUM.
10 „ DITELUM.
11 „ MEXICANUM.
12 HARUSPEX CHONTALENSIS.
13 IRONEUS PULCHER.
14 NEPHALIUS RUTILUS.
15 PERIBÆUM BIMACULATUM.
16 TRICHOPHORUS ALBISPARSUS.
17 IBIDION GRISEICOLLE.
18 ALCYOPIS CHALCEA.
19 OPHISTOMIS RUFIVENTRIS
20 „ NIGELLUS.
21 „ PICTICORNIS.
22 „ BELTI.
23 GAUROTES DONACIOIDES.

W.Purkiss del. et lth.

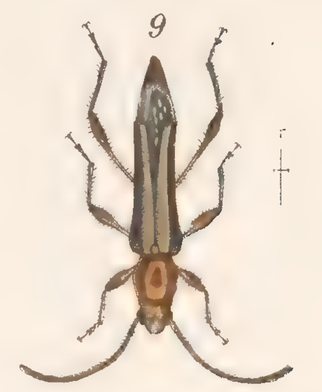
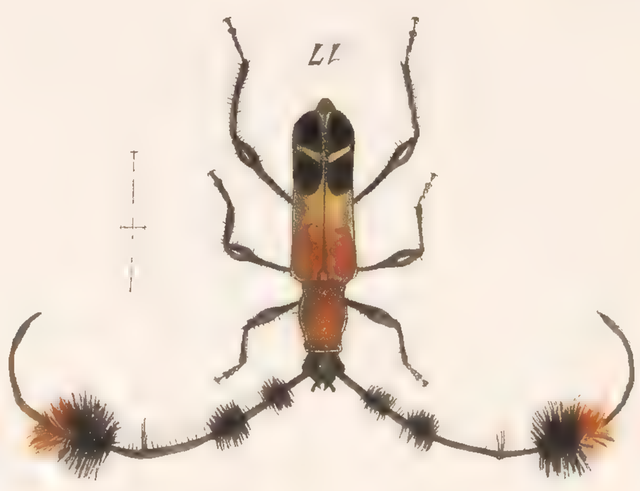
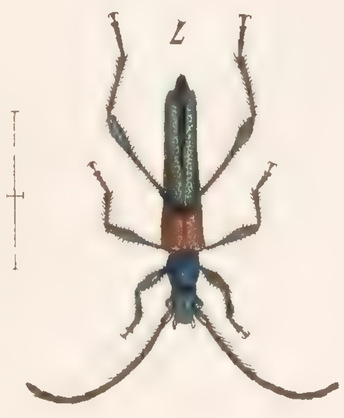
Hanhart imp

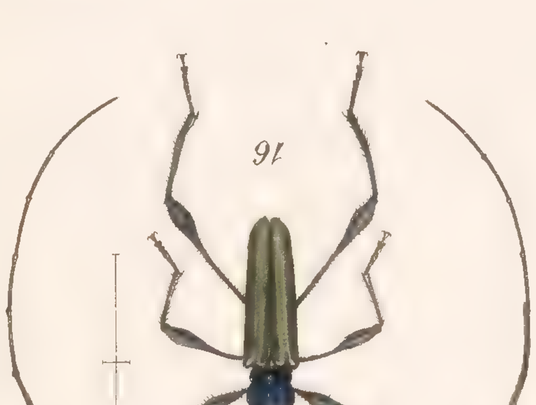
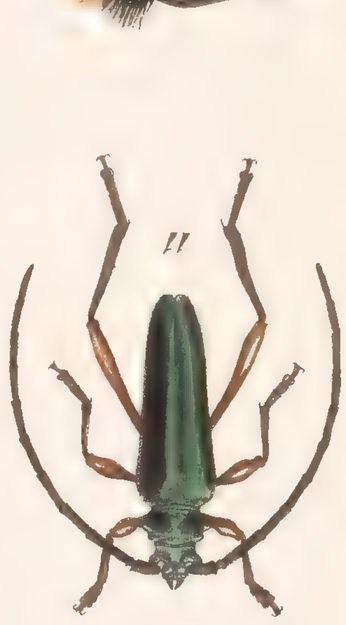
KODAK Color Control Patches
© The Tiffen Company, 2000
Kodak
LICENSED PRODUCT
Blue Cyan Green Yellow Red Magenta White 3/Color Black
Centimeters
Inches

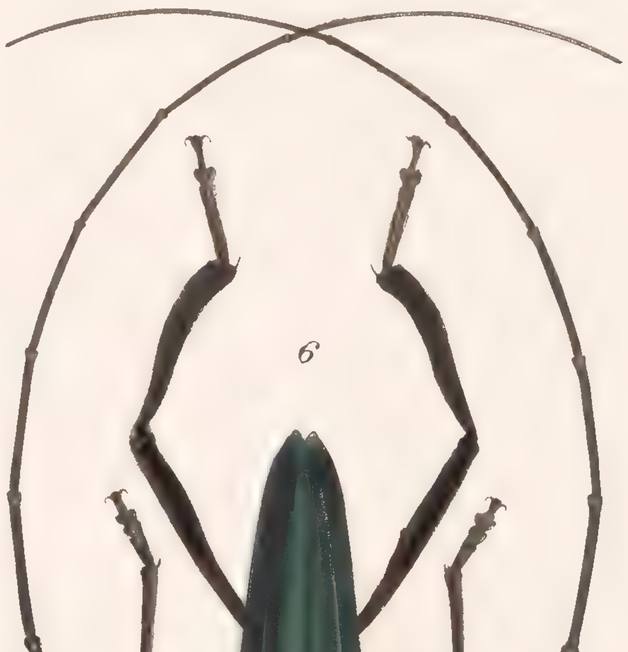
Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
KODAK Color Control Patches © The Tiffen Company, 2000
Kodak LICENSED PRODUCT
Blue Cyan Green Yellow Red Magenta White 3/Color Black

W.Purkiss del. et lith. Hanhart imp. 136

1 TETHLIMMENA ALIENA.
2 OPHISTOMIS PALLIDUS.
3 CHONTALIA CYANICOLLIS.
4 OMMATA CLARA.
5 " CYANIPENNIS.
6 " MONOSTIGMA.
7 OMMATA BELTIANA.
8 CALLICHROMA COSMICA.
9 " HOLOCHLORA.
10 " CYANOMELAS.
11 " XANTHOGASTRA.
12 DIPHYRAMA SINGULARIS.
13 DIHAMMOPHORA CHONTALENSIS.
14 MECOMETOPUS JANSONI.
15 RHOPALOPHORA VERSICOLOR.
16 COSMISOMA MARTYRA.
17 " TITANIA.



Blatt. Beetle. Fam.

Coleoptera. Vol. 5

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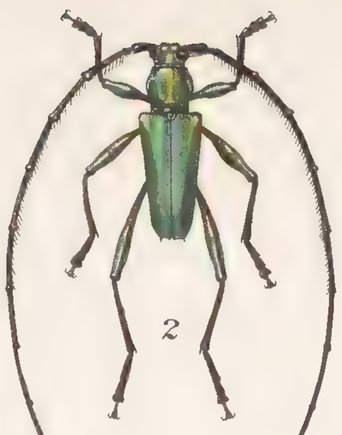
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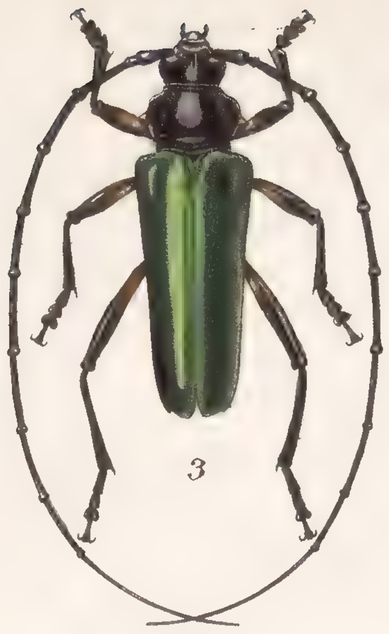
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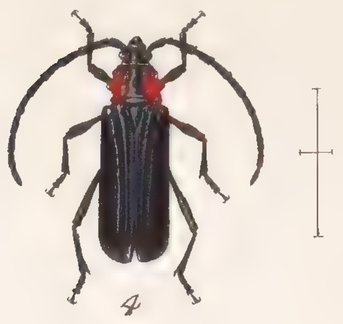
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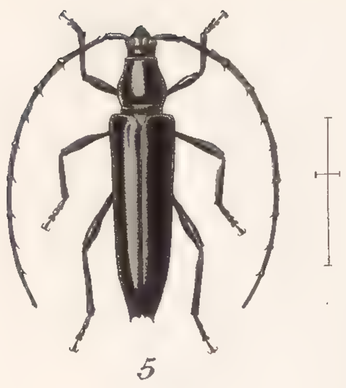
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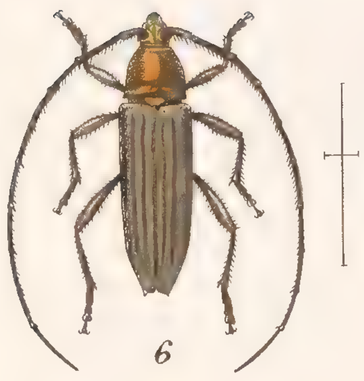
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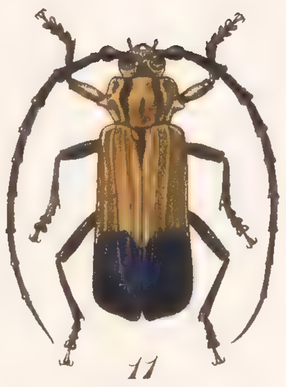
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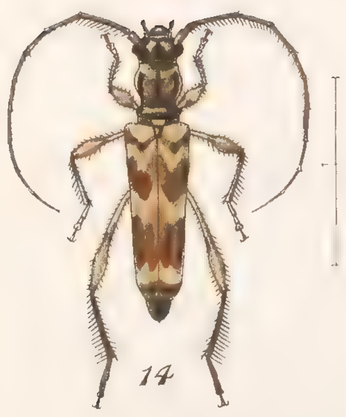
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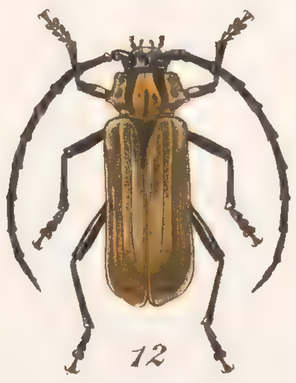
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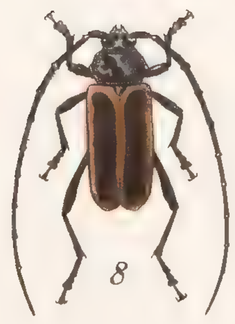
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1 CŒLARTHRON QUADRINOTATUM.
2 CHRYSOPRASIS BELTI.
3 CRIOPROSOPUS RUTILANS.
4 PLEUROMENUS BACCIFER.
5 STENOSPHENUS EBENINUS.
6 „ OCHRACEUS.
7 METALEPTUS BINOCULUS
8 „ MARGINELLUS.
9 MEGADERUS LATIFASCIATUS.
10 CLEOZONA PULCHRA.
11 EVANDER NOBILIS.
12 „ UNICOLOR.
13 TRACHYDERES HILARIS.
14 OZODES XANTHOPHASMA.
15 ERIPHUS PROLIXUS.
16 DISTENIA RUFIPES.
17 „ GENICULATA.
18 COMETES PULCHERRIMUS.

W Purkiss del et lith.

Hanhart imp
134

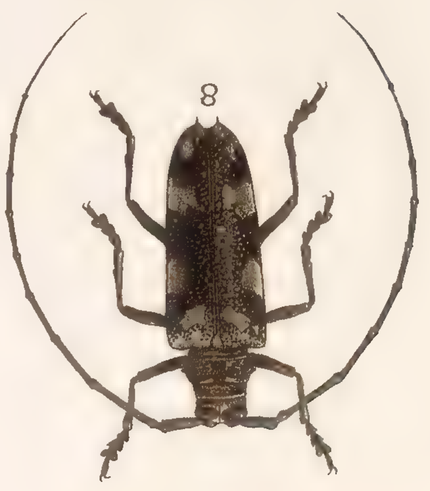
KODAK Color Control Patches © The Tiffen Company, 2000
Kodak LICENSED PRODUCT
Blue Cyan Green Yellow Red Magenta White 3/Color Black
Centimeters Inches

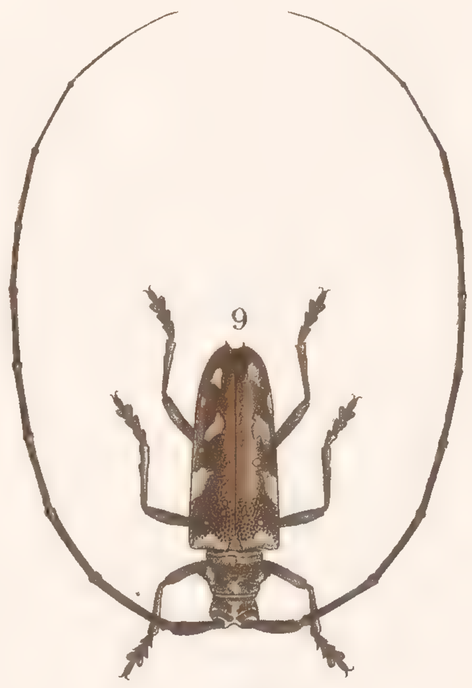
Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
KODAK Color Control Patches © The Tiffen Company, 2000
Kodak
LICENSED PRODUCT
Blue Cyan Green Yellow Red Magenta White 3/Color Black

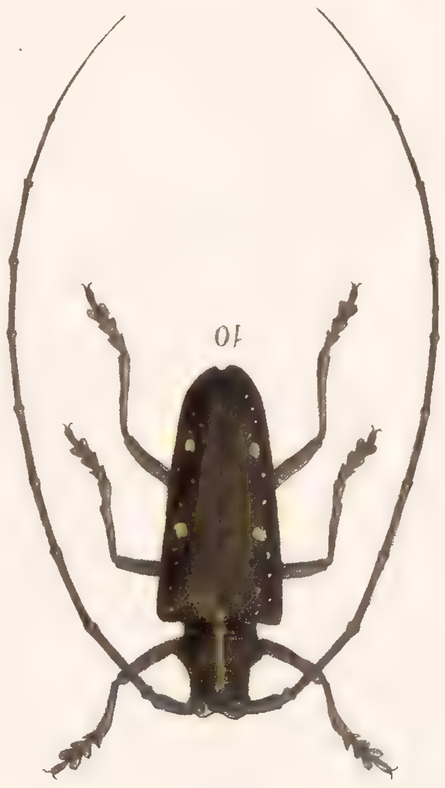
W. Purkiss. del. et lith.

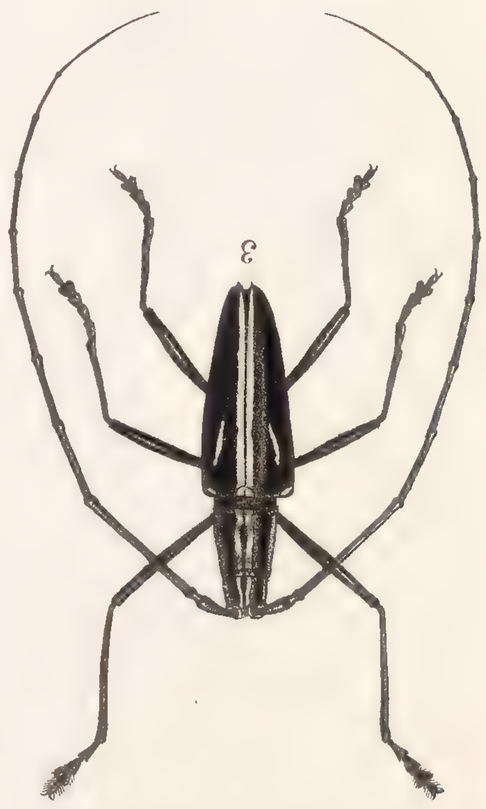
Hanhart. imp. 154

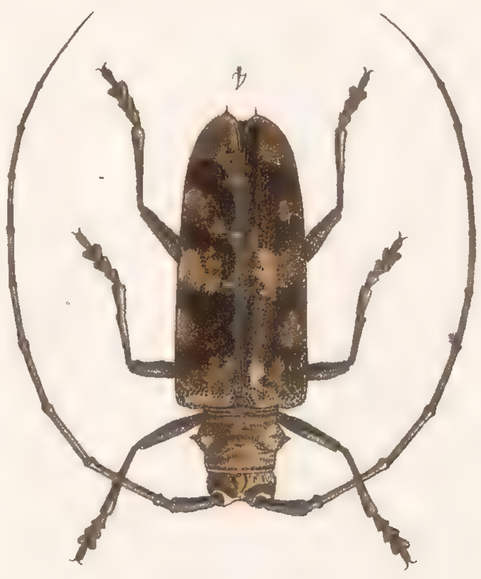
1. PTYCHODES NIVEISPARSUS. 5 ♀, 6 ♂ HAMODERUS ELATUS. 8. HAMODERUS NITIDUS.
2. " CRETATUS. 7 SPINIPENNIS. 9. DELIATHIS NIVEA.
3. " LECONTEI. 10. TÆNIOTES LUCIANI.
4. HAMODERUS RUBEFACTUS. 11. " PRÆCLARUS.

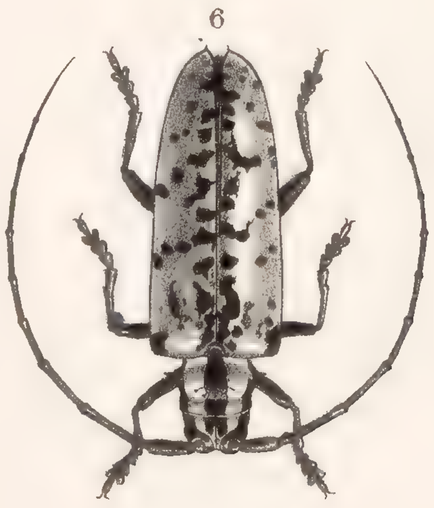


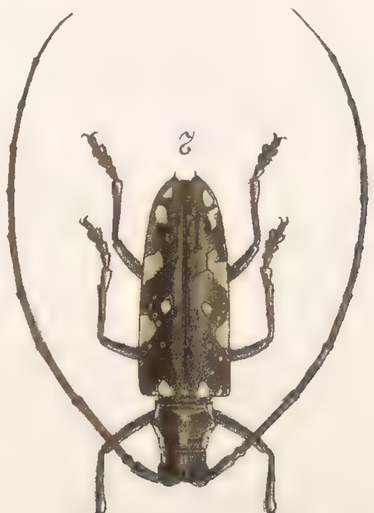












Coleoptera V Tab. 7.

Stark Centr. Am.

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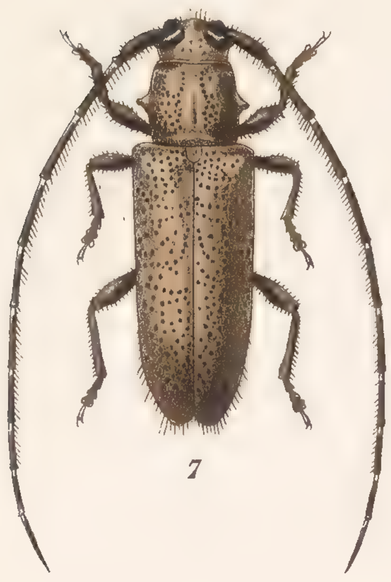
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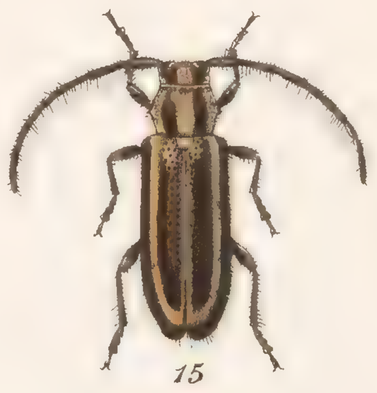
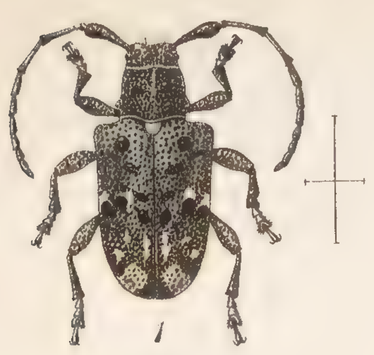

15

1 TAUTOCLINES SCISSICAUDA.
2 „ BINOTATA.
3 ADETUS VALIDUS.
4 „ MUTICUS.
5 „ COSTICOLLIS.
6 PTERICHTHYA FURCULICAUDA.
7 ESTHLOGENA POROSA.
8 DESMIPHORA FASCICULATA.
9 „ CIRRHOSA.
10 „ CANESCENS.
11 ESTOLA IGNOBILIS.
12 „ VITTULATA.
13 EUPOGONIUS URSULUS.
14 „ SUBÆNEUS.
15 „ FLAVOCINCTUS.
16 EPECTASIS ATTENUATA.
17 JAMESIA PAPULENTA.
18 „ MULTIVITTATA.
19 TYBALMIA CÆCA.
20 ISCHIOCENTRA MACULOSA.
21 „ HERALDICA.
22 ÆRENEA IMPETIGINOSA.

W.Purkiss del.et lith.

Hanhart imp.
153

KODAK Color Control Patches
© The Tiffen Company, 2000
Kodak
LICENSED PRODUCT
Blue Cyan Green Yellow Red Magenta White 3/Color Black
Inches 1 2 3 4 5 6 7 8
Centimeters 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19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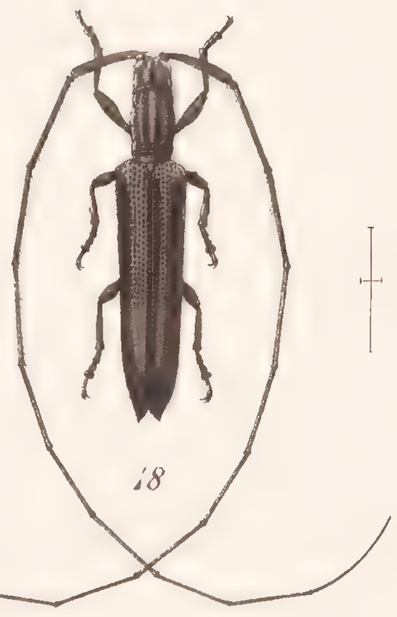
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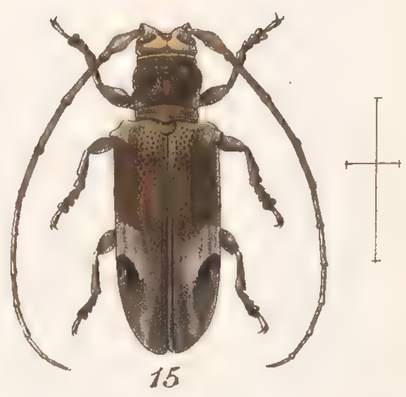
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1 THRYALLIS MACULOSUS.
2 ANISOCERUS PALLIATUS. 7♂, 8♀ HYPSIOMA PICTICORNIS. 14 ECTHÆA QUADRICORNIS, ♀.
3 CHALASTINUS RUBROCINCTUS. 9♀, 10♂ ONCIDERES CALLIDRYAS, *var.* 15 TRESTONIA ASSULINA.
4 GYMNOCERUS BELTI. 11 „ FULVOSTILLATUS. 16 AMPHICNÆIA CRUSTULATA.
5 HOPLISTOCERUS GEMMATUS. 12 „ ALBOMARGINATA. 17 „ BREVIVITTIS.
6 TARICANUS TRUQUII. 13 EUDESMUS POSTICALIS. 18 HIPPOPSIS LINEOLATA.

W.Purkiss del. et lith.

Hanhart imp.
155

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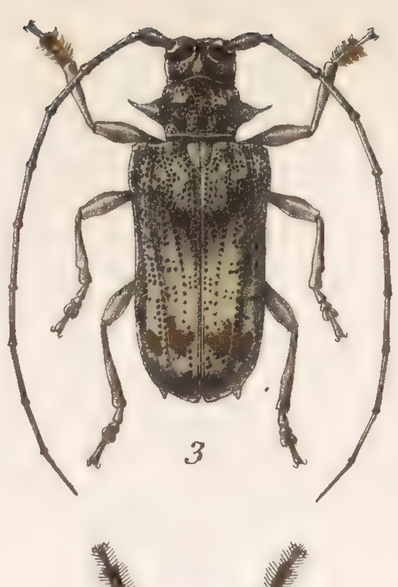
2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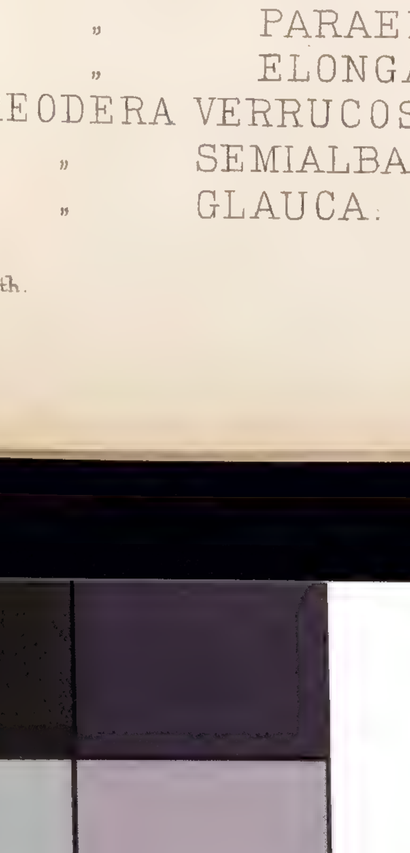
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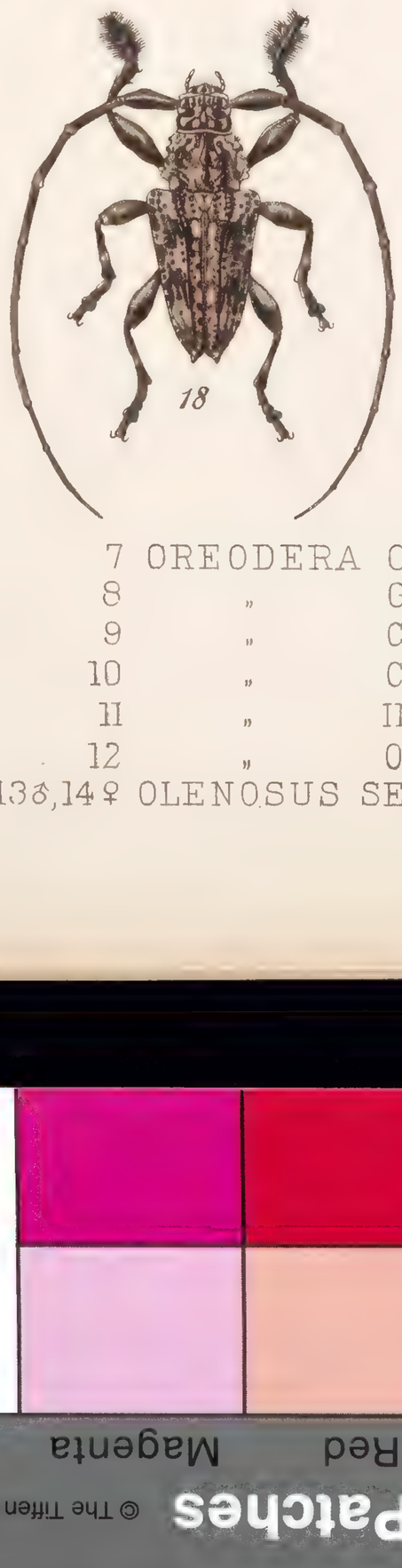
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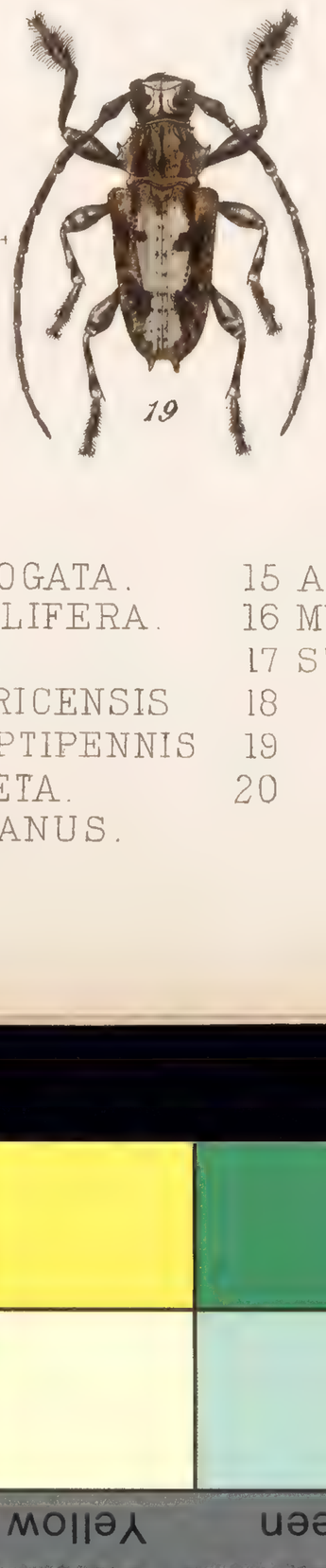
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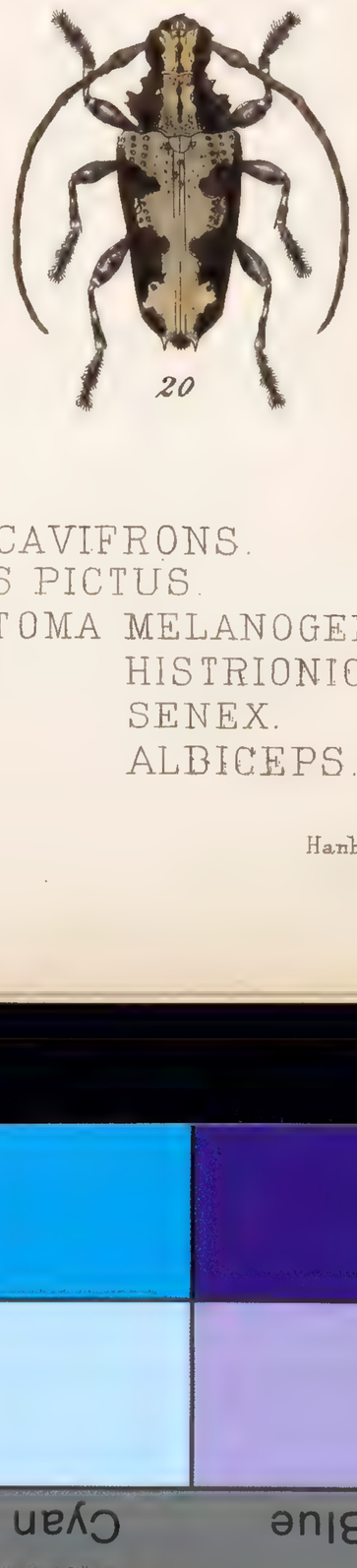
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1 POLYRHAPHIS FABRICII.
2 „ PARAENSIS.
3 „ ELONGATA.
4 OREODERA VERRUCOSA.
5 „ SEMIALBA.
6 „ GLAUCA.
7 OREODERA CANOTOGATA.
8 „ GRANULIFERA.
9 „ CALBA.
10 „ COSTARICENSIS
11 „ INSCRIPTIPENNIS
12 „ OBSOLETA.
13♂,14♀ OLENOSUS SERRIMANUS.
15 ALPHUS CAVIFRONS.
16 MYOXINUS PICTUS.
17 STEIRASTOMA MELANOGENYS.
18 „ HISTRIONICUM.
19 „ SENEX.
20 „ ALBICEPS.

W.Purkiss lith.

Hanhart imp.
165

KODAK Color Control Patches
© The Tiffen Company, 2000
Kodak LICENSED PRODUCT
Blue Cyan Green Yellow Red Magenta White 3/Color Black
Inches 1 2 3 4 5 6 7 8
Centimeters 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19

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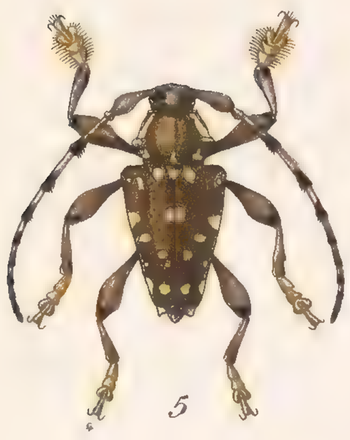
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1 ALPHUS CAVIFRONS, *var.*
2 ÆTHOMERUS ANTENNATOR.
3 ACANTHODERES FUNERARIUS.
4 " " *var.*
5 " LÆVICOLLIS.
6 PTERIDOTELUS LACHRYMOSUS.
7 DISCOPUS QUADRISCOPULATUS.
8 ACANTHODERES INQUINATUS.
9 " BIVITTA.
10 LAGOCHIRUS CRISTULATUS.
11 " BINUMERATUS.
12 " ROSACEUS.
13 " PRÆCELLENS.
14 LAGOCHIRUS SIMPLICICORNIS.
15 " ROGERSI.
16 LEPTOSTYLUS VIRIDITINCTUS.
17 " HILARIS.
18 " SUBFURCATUS.
19 " CINERACEUS.
20 " TRIANGULIFER.

W.Purkiss lith.

Hanhart imp.
164

Inches 1 2 3 4 5 6 7 8
Centimeters 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
KODAK Color Control Patches
© The Tiffen Company, 2000
Kodak LICENSED PRODUCT
Blue Cyan Green Yellow Red Magenta White 3/Color Black

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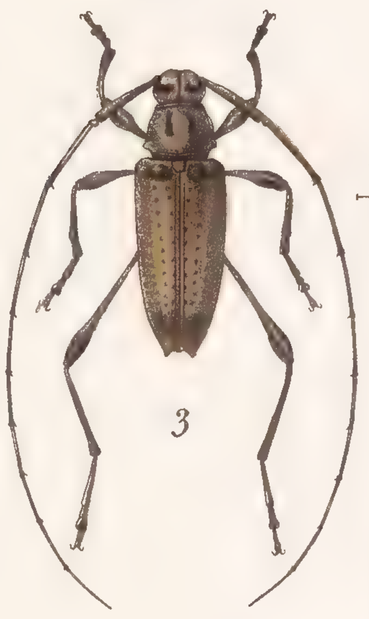
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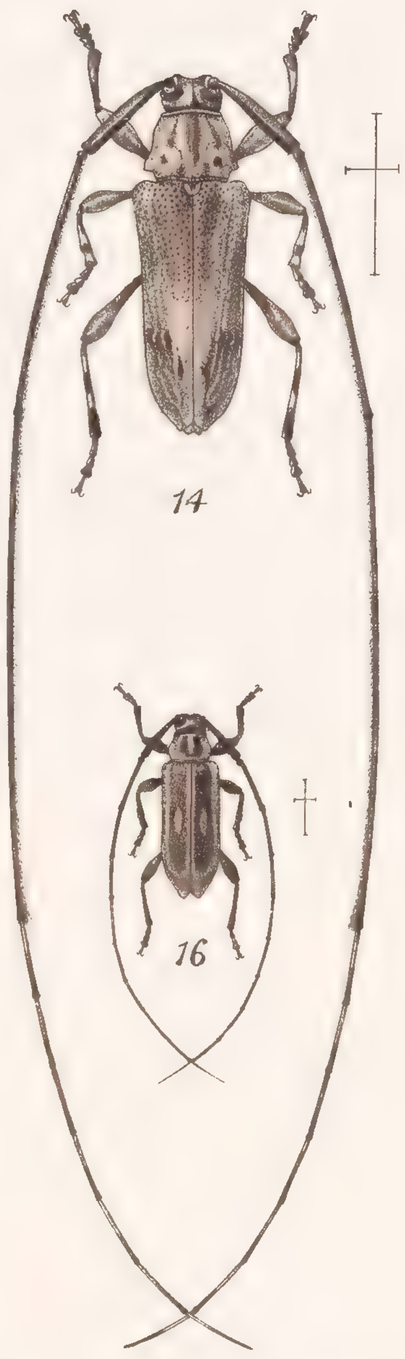
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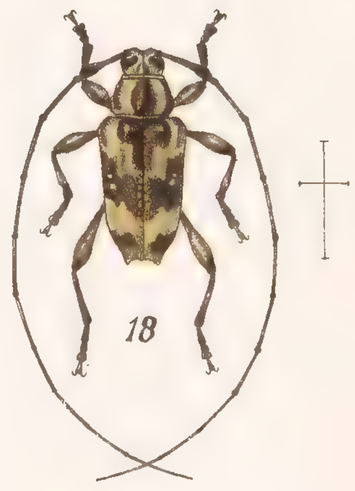
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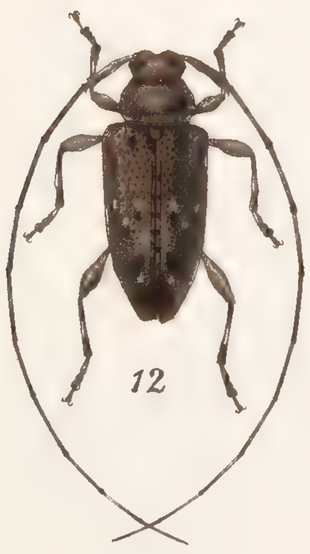
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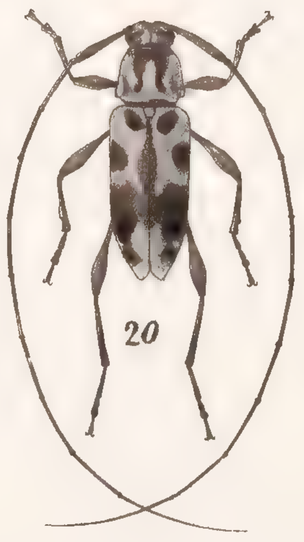
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1 OZINÆUS ARIETINUS.
2 ANISOPODUS ARGUS.
3 „ SCRIPTIPENNIS, *Var.*
4♀,5♂ „ HAMATICOLLIS.
6 „ PHALANGODES.
7 „ SCRIPTIPENNIS.
8 CHÆTANES SETIGER.
9 ŒDOPEZA INCERTA.
10 LOPHOPŒUM PRIVATUM.
11 „ BARBISCAPUM.
12 „ SARONOTUM.
13 ALCIDION BRACHIALE.
14 MECOTETARTUS ANTENNATUS.
15 HEXACONA ARMATA.
16 LEPTURGES CIRCUMSCRIPTUS.
17 „ CALLIGRAMMA, *Var.*
18 „ LÆTABILIS.
19 „ LÆTIFICUS.
20 „ GRATIOSUS.

W.Purkiss lith. Hanhart imp 183

Inches 1 2 3 4 5 6 7 8
Centimeters 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
KODAK Color Control Patches © The Tiffen Company, 2000
Kodak LICENSED PRODUCT
Blue Cyan Green Yellow Red Magenta White 3/Color Black

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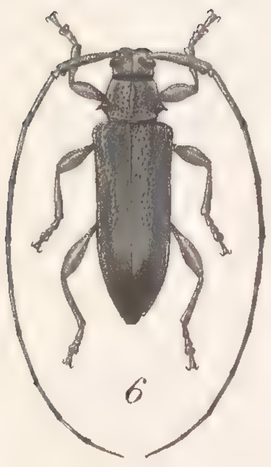
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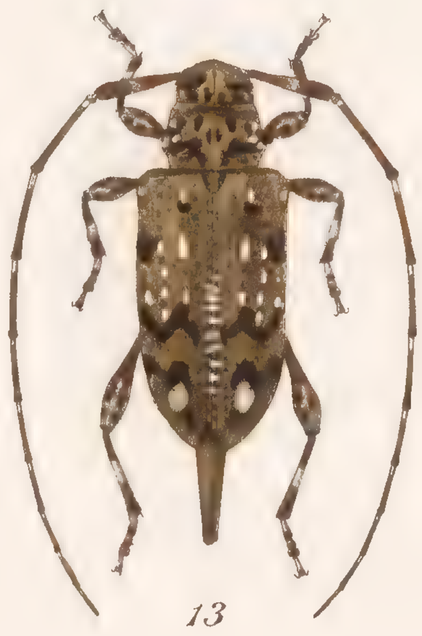
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1 BARYSSINUS BILINEATUS.
2 LEPTURGES CALLIGRAMMA.
3 „ INFILATUS.
4 „ FESTIVUS.
5 „ NAVICULARIS.
6 DECTES MEXICANUS.
7 PROBATIUS MEXICANUS.
8 COSMOTOMA RUBELLA.
9 ATRYPANIUS CONSPERSUS.
10 TRYPANIDIUS RUBRIPES.
11 „ MEXICANUS.
12 „ GEMINUS.
13 ŒDOPEZA GUTTIFERA.
14 „ POGONOCHEROIDES.
15 NYSSODRYS PUNCTATELLA.
16 „ DELETA.
17 „ POLYGRAMMA.
18 „ LEUCOPYGA.
19 HYLETTUS CŒNOBITA.
20 ASTYNOMUS MUCOREUS.

W. Purkiss lith.

Hanhart imp.
181

KODAK Color Control Patches © The Tiffen Company, 2000
Kodak LICENSED PRODUCT
Blue Cyan Green Yellow Red Magenta White 3/Color Black
Centimeters
Inches

1 OXATHRES PICTULUS.
2 LAGOCHIRUS LONGIPENNIS.
3 ALCIDION EULOPHUM.
4 LEPTURGES ROSEICOLLIS.
5 „ CLERULUS.
6 ASTYNOMUS VEXILLARIS.
7 „ SETIGER.
8 CARPHINA ARCIFERA.
9 CARTERICA GEOMETRICA.
10 PRISCILLA HYPSIOMOIDES.
11 COLOBOTHEA CHONTALENSIS.
12 „ RAMOSA.
13 „ HEBRAICA.
14 COLOBOTHEA UNILINEATA.
15 „ DISPERSA.
16 „ DISTINCTA.
17 „ BITINCTA.
18 CARNEADES SUPERBA.
19 „ HEMILEUCA.
20 „ PRINCEPS.

W.Purkiss lith. Hanhart imp

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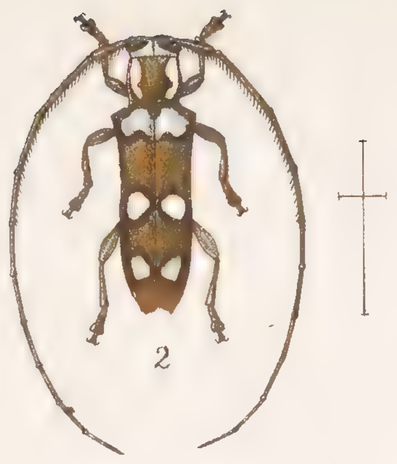

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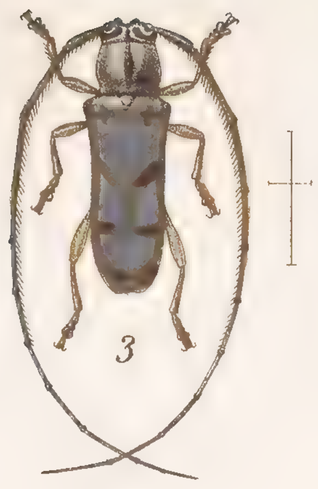

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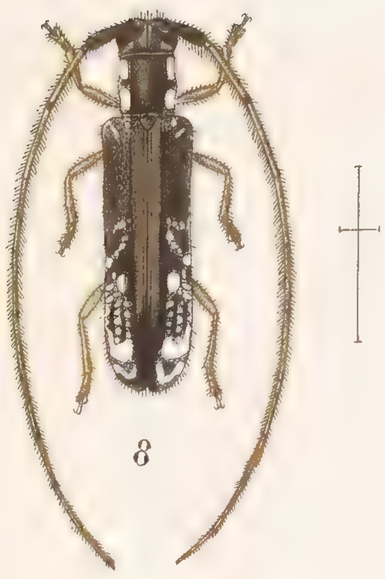

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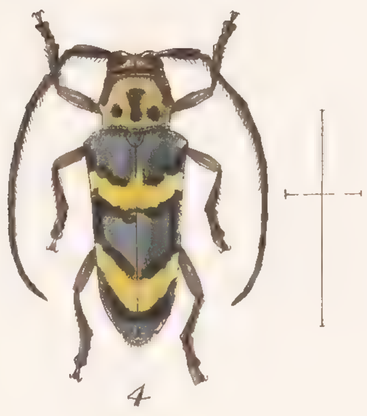

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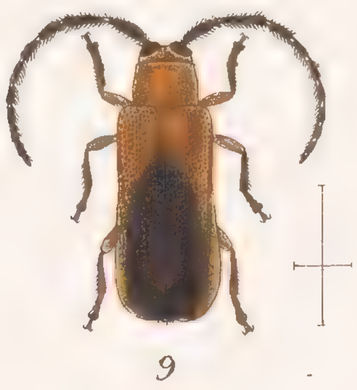

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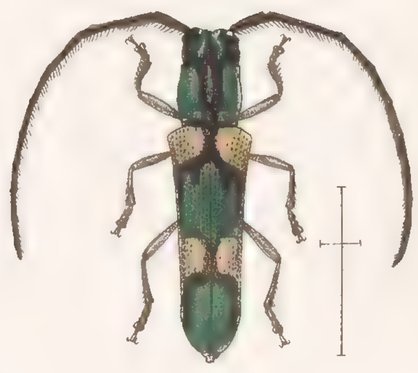

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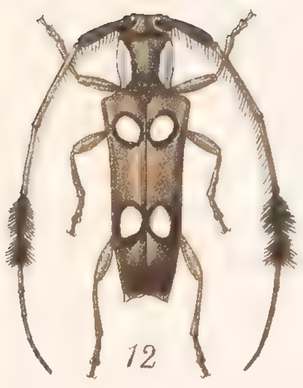

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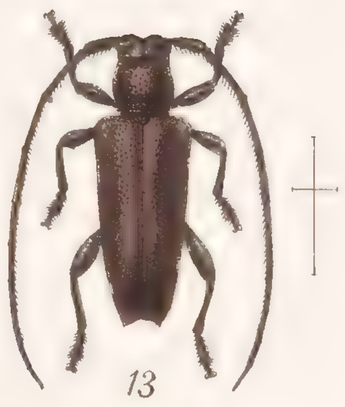

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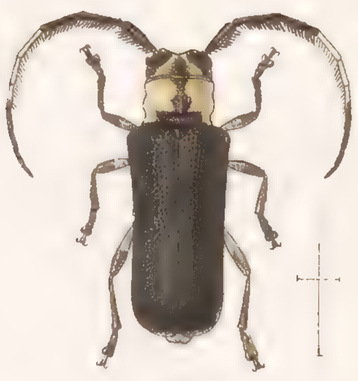

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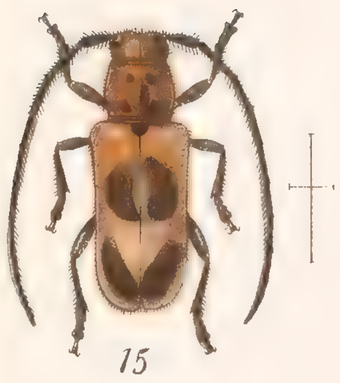

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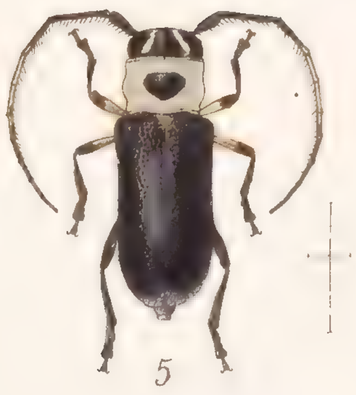

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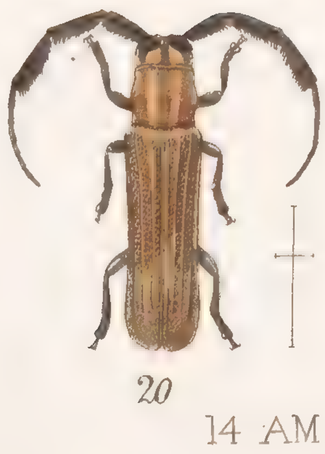

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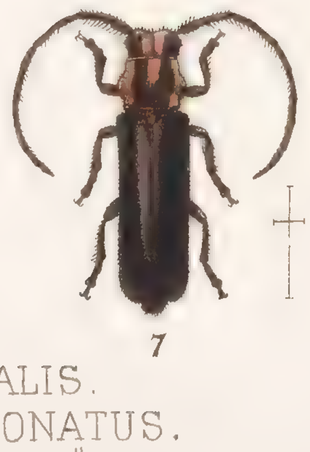


7

1 LYCIDOLA BELTI.
2 AMPHIONYCHA PRINCEPS.
3 „ ALBARIA.
4 „ BIFASCIATA.
5 „ CRASSICEPS.
6 PHÆA MIRABILIS.
7 „ VITTICOLLIS.
8 ANTODYCE CRETATA.
9 ISOMERIDA SUBDILATATA.
10 „ PICTICORNIS.
11 EULACHNESIA SMARAGDINA.
12 CIRRHICERA CHAMPIONI.
13 CYMATONYCHA CASTANEA.
14 AMILLARUS APICALIS.
15 TETRAOPES UMBONATUS.
16 DYLOBOLUS OBEREOÏDES.
17 EUMATHES CUPRASCENS.
18 ERANA BINOTATA.
19 CALLIA FULVOCINCTA.
20 HEMILOPHUS PROLIXUS.

W. Purkiss lith.

Hanhart imp
180

Inches 1 2 3 4 5 6 7 8
Centimetres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
KODAK Color Control Patches © The Tiffen Company, 2000
Kodak LICENSED PRODUCT
Blue Cyan Green Yellow Red Magenta White 3/Color Black

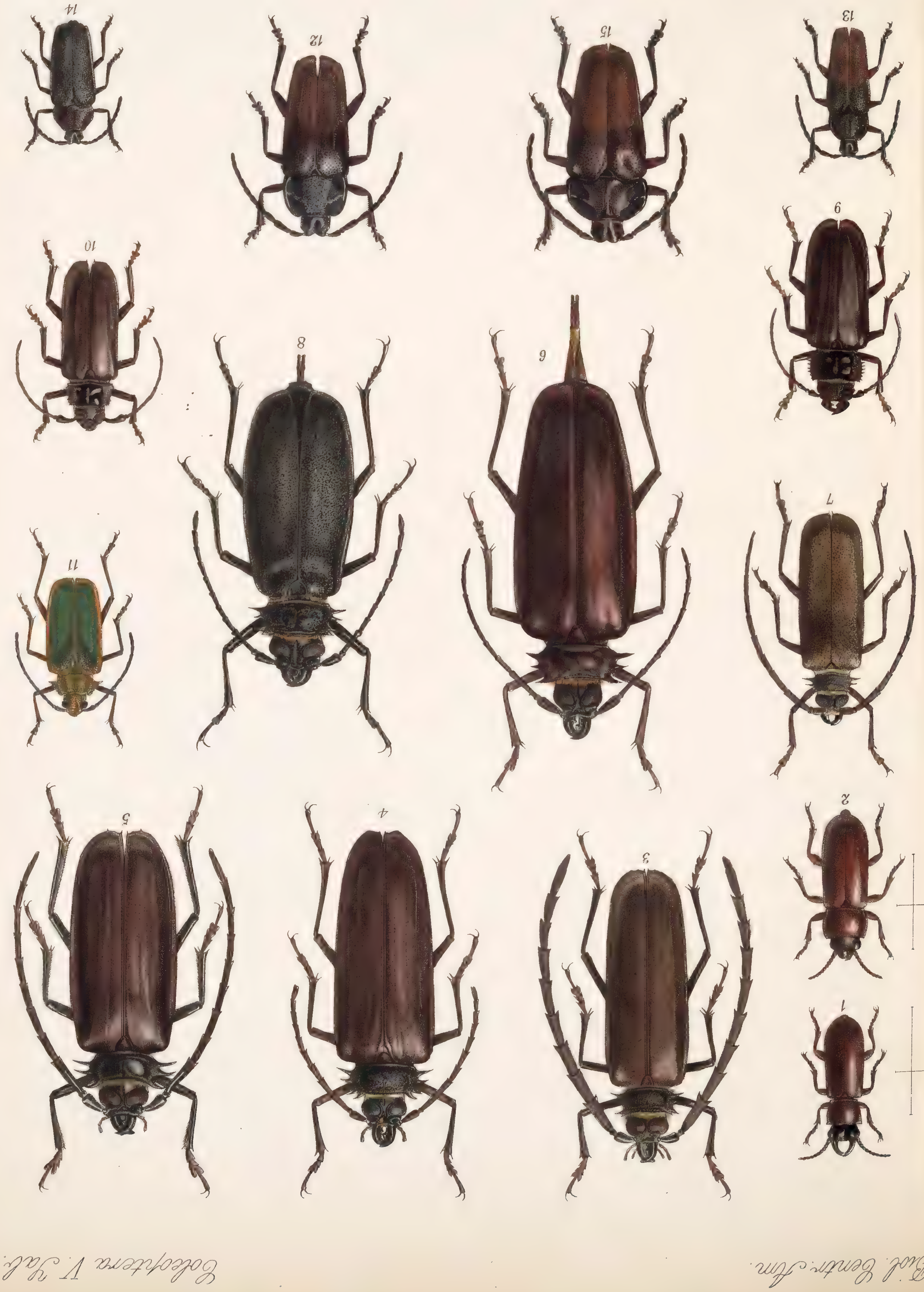
Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
KODAK Color Control Patches © The Tiffen Company, 2000
Kodak
LICENSED PRODUCT
Blue Cyan Green Yellow Red Magenta White 3/Color Black

13 PARANDRA ANGULICOLLIS.
2♀ " LATA.
3♂,4♀ PITHOCLES PROCERUS.
5♂,6♀ DEROBRACHUS SULCICORNIS.

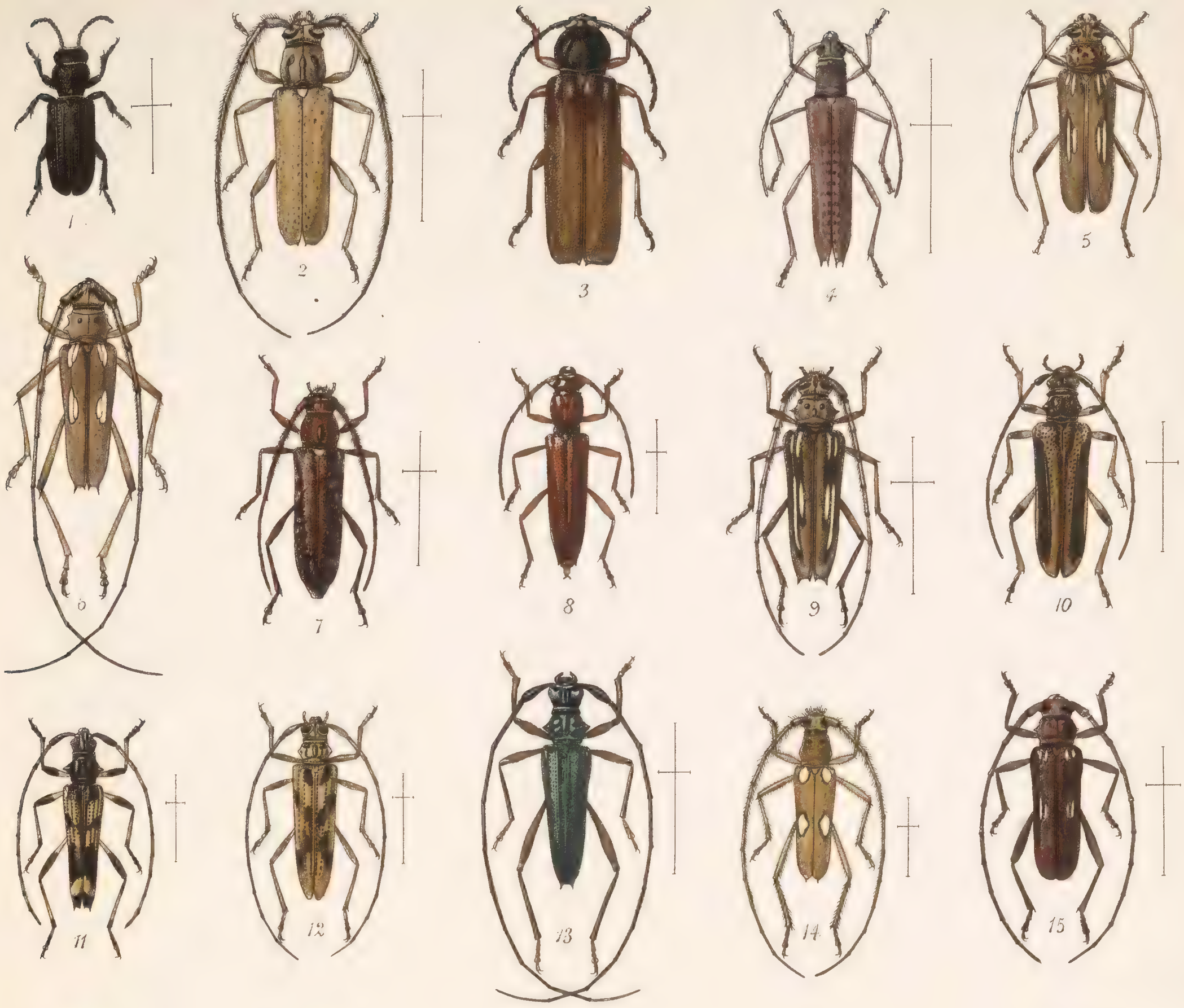
7♂,8♀ DEROBRACHUS APTERUS.
9♂ APLAGIOGNATHUS HYBOSTOMA.
10 MALLODONOPSIS CORROSUS.

11 PYRODES MARGINATUS.
12♂ HOLONOTUS LATITHORAX.
13♂,14♀ " MINOR.
15♂ " LAEVITHORAX.

W Purkiss lith. Heubert imp 373



Gen. Beetles. Pl. *Coleoptera V. Tab. 16.*



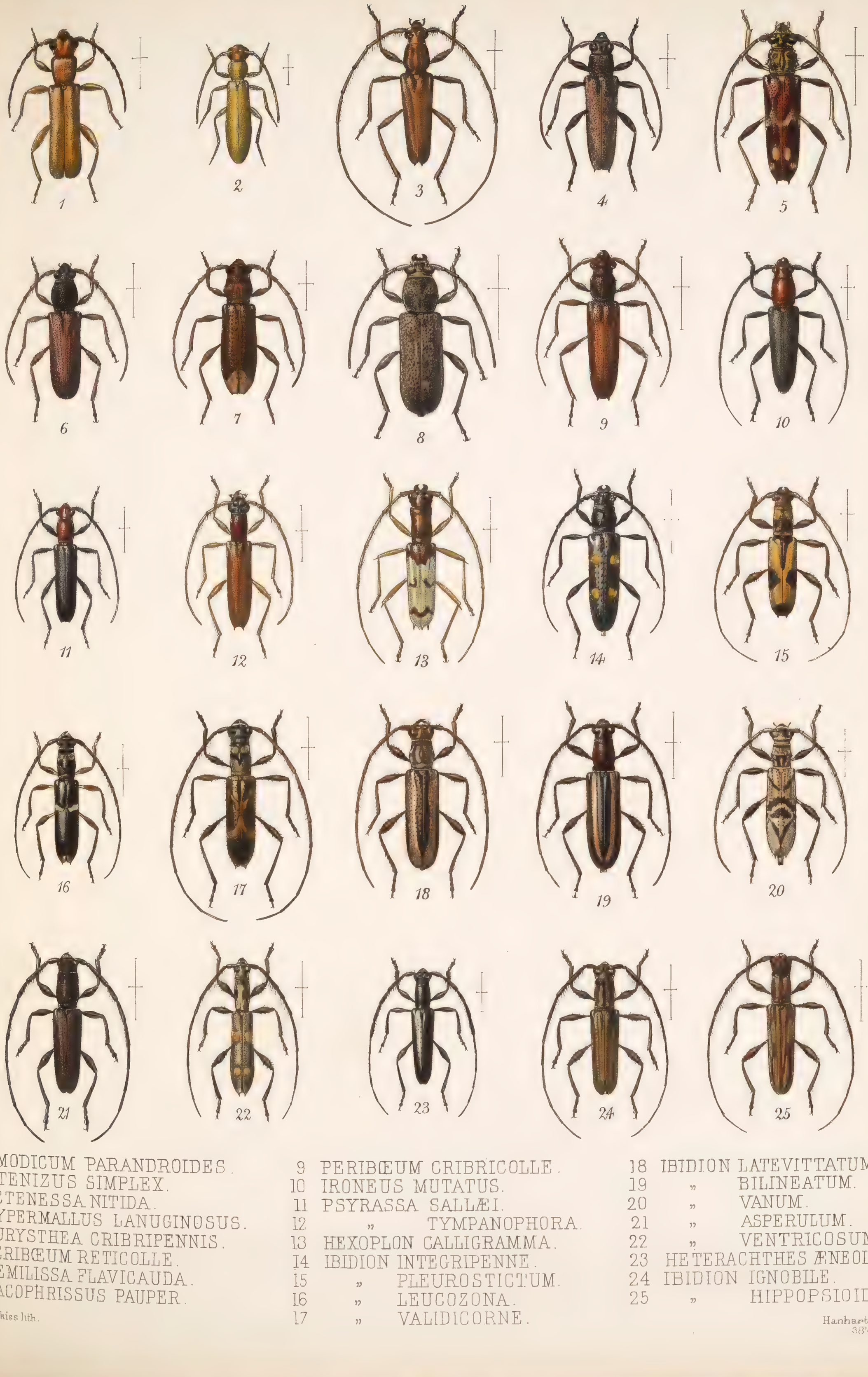
1 SPONDYLIS MEXICANUS.
2 PERILASIUS CHAMPIONI.
3 XENAMBYX LATICAUDA.
4 HYPERMALLUS LONGISSIMUS.
5 EBURIA BLANCANEAUXI.
6 „ CHAMPIONI.
7 TRICHOPHORUS DECIPIENS.
8 PSYRASSA CASTANEA.

W. Purkiss lith.

9 EBURIA MACROTÆNIA.
10 DISTENIA VITTATA.
11 „ FULVOPICTA.
12 „ LINEATOPORA.
13 „ SALLÆI.
14 EBURODACRYS COALESCENS.
15 EBURIA ROTUNDIPENNIS.
16 „ CLARA.
17 EBURODACRYS MEXICANA.

18 DISTENIA BREVICORNIS.
19 HYPERMALLUS EXIMIUS.
20 „ UNDULATUS.
21 SPHÆRIONILLUM QUADRISIGNATUM.
22 IBIDION OBTUSUM, V. SEGRETATUM.
23 „ ALACRE.
24 „ TENUISSIMUM.
25 „ TENUATUM.

Hanhart imp
382.



1 SMODICUM PARANDROIDES.
2 ATENIZUS SIMPLEX.
3 ECTENESSA NITIDA.
4 HYPERMALLUS LANUGINOSUS.
5 EURYSTHEA CRIBRIPENNIS.
6 PERIBŒUM RETICOLLE.
7 HEMILISSA FLAVICAUDA.
8 CACOPHRISSUS PAUPER.

W Purkiss lith.

9 PERIBŒUM CRIBRICOLLE.
10 IRONEUS MUTATUS.
11 PSYRASSA SALLÆI.
12 „ TYMPANOPHORA.
13 HEXOPLON CALLIGRAMMA.
14 IBIDION INTEGRIPENNE.
15 „ PLEUROSTICTUM.
16 „ LEUCOZONA.
17 „ VALIDICORNE.

18 IBIDION LATEVITTATUM.
19 „ BILINEATUM.
20 „ VANUM.
21 „ ASPERULUM.
22 „ VENTRICOSUM.
23 HETERACHTHES ÆNEOLUS
24 IBIDION IGNOBILE.
25 „ HIPPOPSIOIDES

Hanhart imp.
387

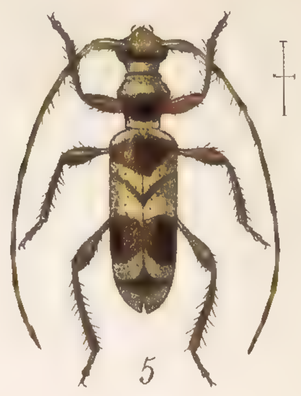
KODAK Color Control Patches © The Tiffen Company, 2000
Kodak LICENSED PRODUCT
Blue Cyan Green Yellow Red Magenta White 3/Color Black
Centimeters
Inches

1

2

3

4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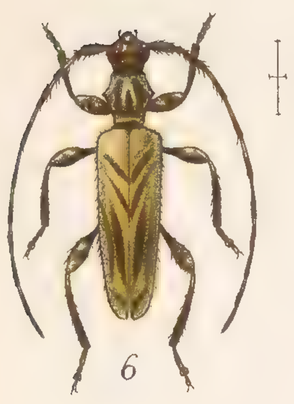
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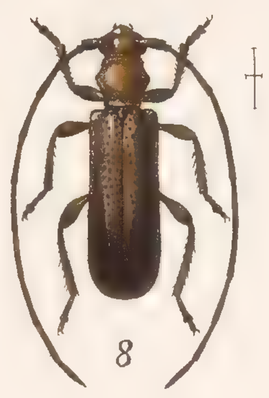
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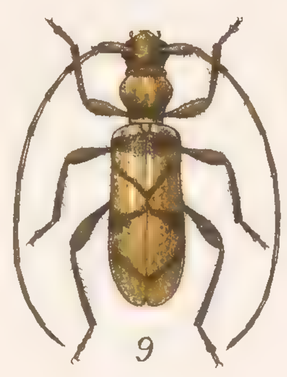
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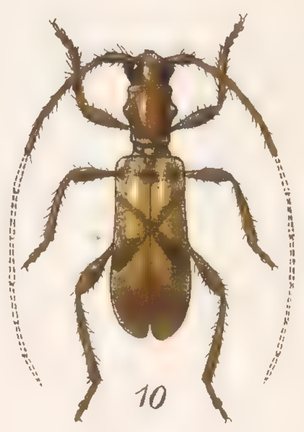
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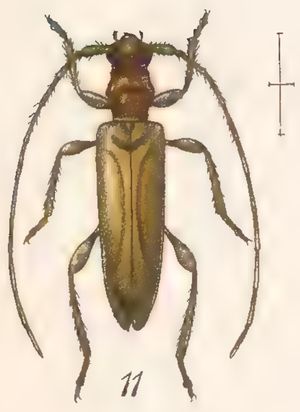
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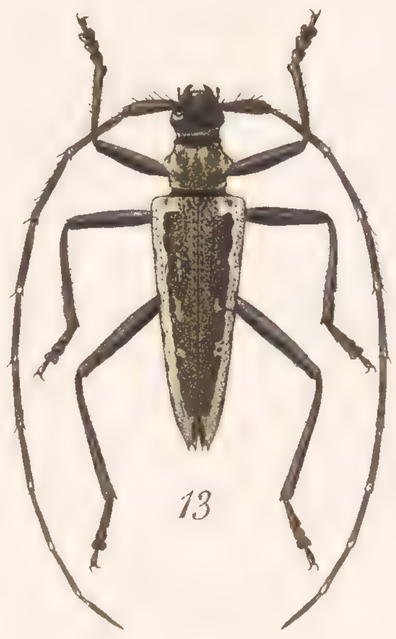
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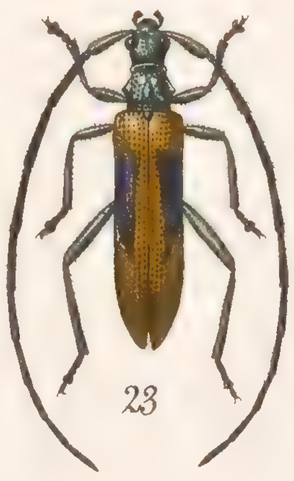
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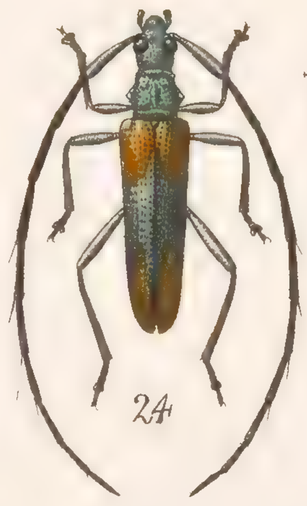
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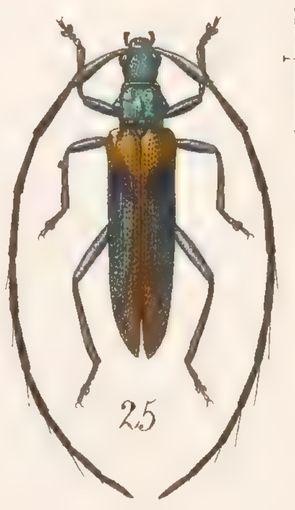
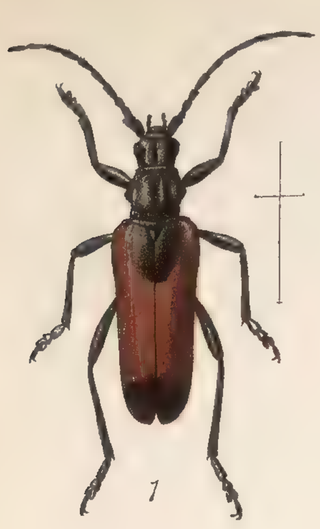

25

1 GNOMIDOLON LÆTABILE.
2 „ INSULICOLA.
3 CURIUS PANAMENSIS.
4 COSCINEDES GRACILIS.
5 OBRIUM CLERULUM.
6 „ LITURATUM
7 „ ANGULOSUM.
8 „ CRIBRIPENNE.
9 OBRIUM CORDICOLLE.
10 „ CRUCIFERUM.
11 „ ARCIFERUM.
12 „ PIPERITUM.
13 DISTENIA FIMBRIATA.
14 „ LIMBATA.
15 „ RUGISCAPIS.
16 „ HÖGEI.
17 ♂ „ „ *Var.*
18 DISTENIA SPINOSA.
19 „ FUSCULA.
20 „ CRIBRISTERNIS.
21 „ PICTIPES.
22 „ LANGURIOIDES.
23 COMETES VENUSTUS
24 „ FESTIVUS.
25 „ HILARIS.

W. Purkiss lith.

Hanhart imp
389.

Inches 1 2 3 4 5 6 7 8
Centimeters 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
KODAK Color Control Patches © The Tiffen Company, 2000
Kodak LICENSED PRODUCT
Blue Cyan Green Yellow Red Magenta White 3/Color Black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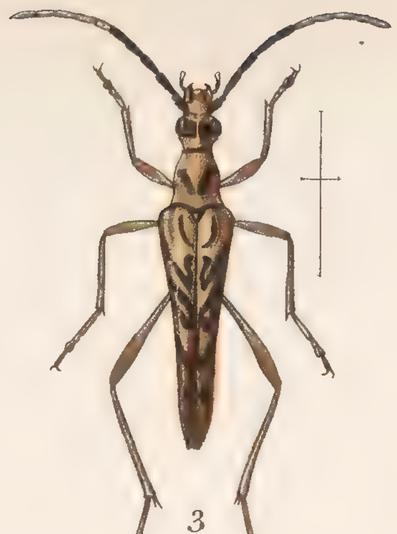
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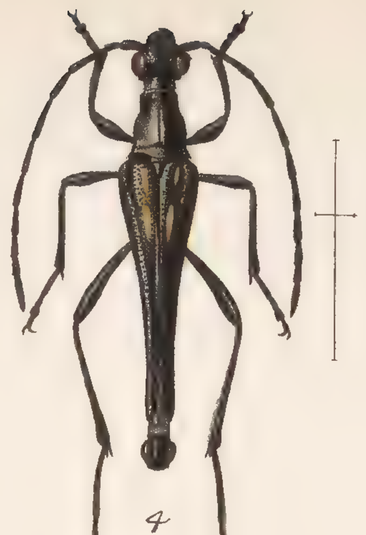
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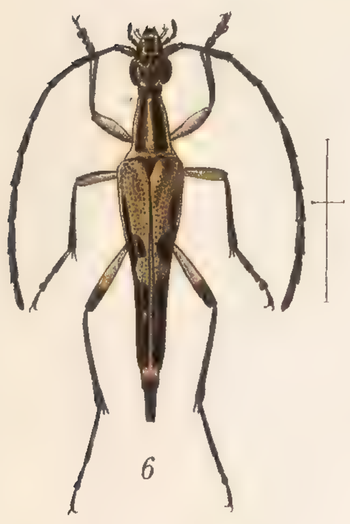
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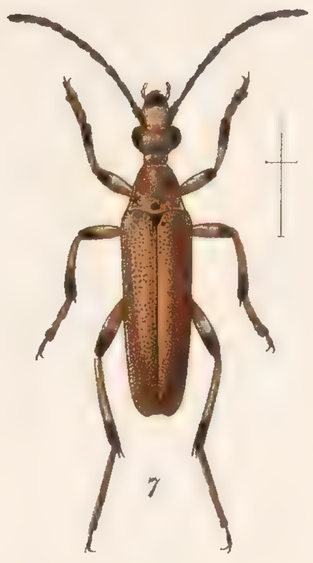
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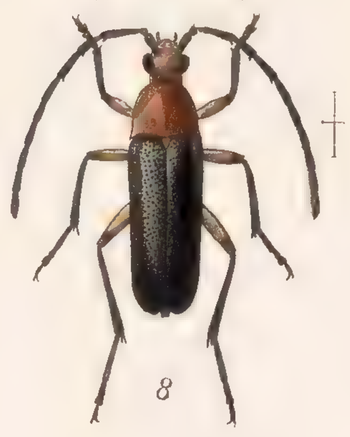
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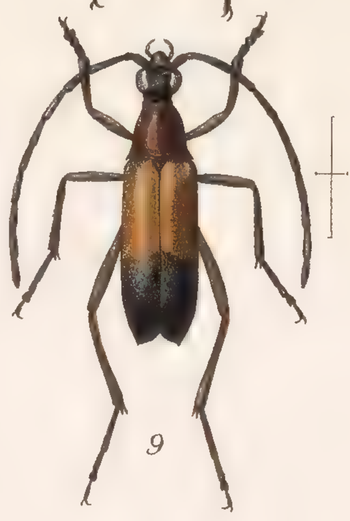
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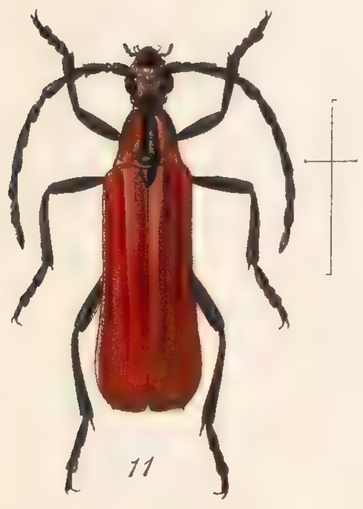
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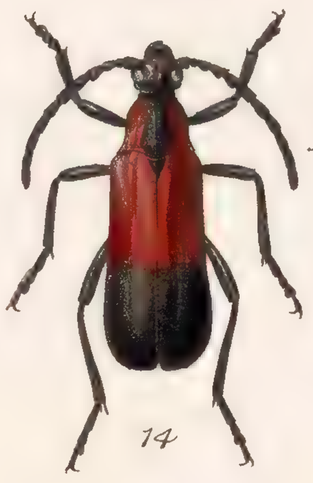
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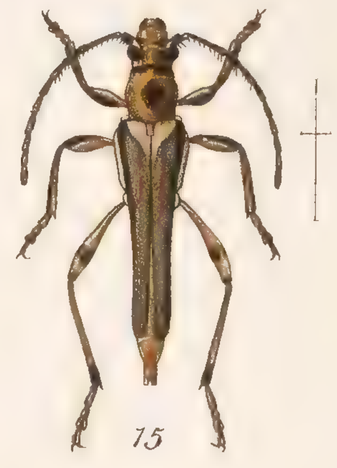
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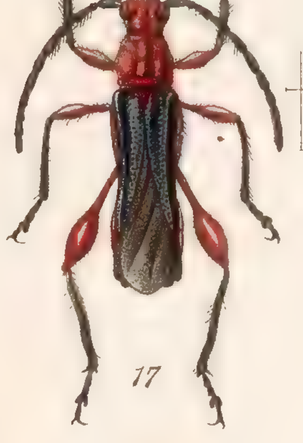
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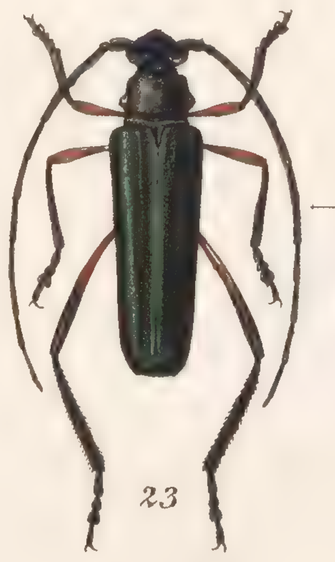
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1 PACHYTA COSTARICENSIS.
2 LEPTURA ANOMALA.
3 OPHISTOMIS HISTRIO.
4 " LACHRYMANS.
5 " FELIX.
6 " SALTATOR.
7 " FULVEOLUS.
8 CHORIOLAUS NANUS.
9 CHORIOLAUS LATESCENS.
10 OXYLYMMA CHAMPIONI.
11 EURYPTERA PRINCEPS.
12 " FULVELLA.
13 " LONGIPENNIS.
14 " PATRICIA.
15 OMMATA SALLÆI.
16♂, 17♀. MERIONEDA GRATIOSA.
18 MERIONEDA CULICINA.
19 ACYPHODERES VELUTINUS.
20 " SUAVIS.
21 " OLIVIERI.
22 STENOPSEUSTES SERICINUS.
23 AMPHIONTHE BREVICOLLIS.
24 ODONTOCERA APICULA.
25 PHESPIA CORINNA.

W. Purkiss lith.
Hanhart imp.
391.

KODAK Color Control Patches © The Tiffen Company, 2000
Kodak LICENSED PRODUCT
Blue Cyan Green Yellow Red Magenta White 3/Color Black
Inches 1 2 3 4 5 6 7 8
Centimeters 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19

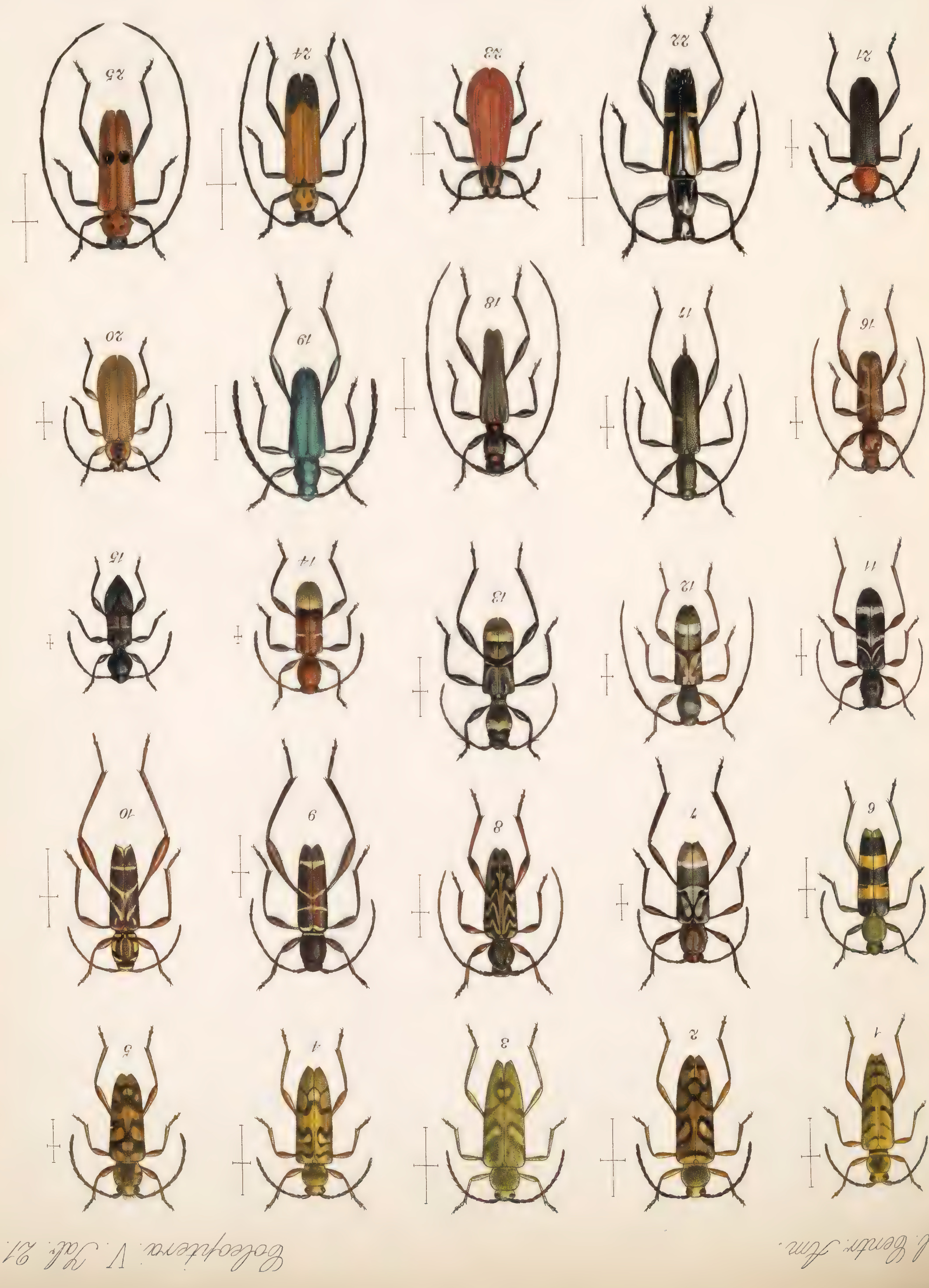
Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
KODAK Color Control Patches © The Tiffen Company, 2000
Kodak
LICENSED PRODUCT
Blue Cyan Green Yellow Red Magenta White 3/Color Black

1 OCHRESTHES ZEBRATUS.
2 " OBLIQUUS.
3 " UMBRATILIS.
4 " SIGMOIDEUS.
5 " VIRIDIVENTRIS.
6 CLYTANTHUS OCHROZONA.
7 MECOMETOPUS REMIPES.
8 NEOCLYTUS CHAMPIONI.

9 NEOCLYTUS PURUS.
10 " BELTIANUS.
11 TILLOCLYTUS CLAVIPES.
12 PEMPTEURYS SERICANS.
13 APILOCERA MAGNA.
14 " RUBELLA.
15 EUDERCES ACUTIPENNIS.
16 APHYSOTES TUBERICOLLIS.
17 CHAMPIONA CTENOSTOMOIDES.

18 EUCHARASSUS DISPAR.
19 ZENOCHLORIS PARADOXA.
20 CORYNELLUS OCHRACEUS.
21 CALLOPISMA CRIBELLUM.
22 PLATYARTHRON SEMIVITTATUM.
23 ELYTROLEPTUS EROS.
24 MANNOPHORUS FORRERI.
25 HEGIA DISTIGMA.

W.P. Hawkins lith. Hanhart imp. 397.



Biol. Centr. Am. Coleoptera. V. Tab. 21.

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
KODAK Color Control Patches © The Tiffen Company, 2000
Kodak
LICENSED PRODUCT
Blue Cyan Green Yellow Red Magenta White 3/Color Black

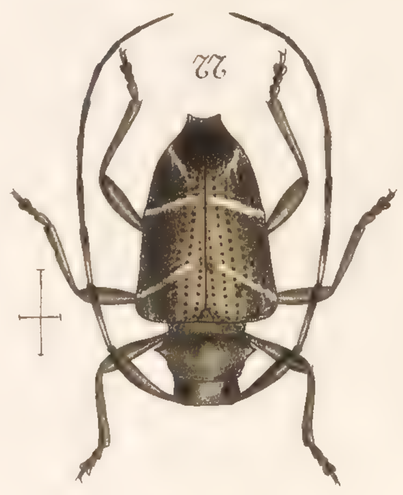
1 HAMODERUS GRANULOSUS.
2 " ORNATOR.
3 " SARGI.
4 " LACERATUS.
5 MECYNOME ÆNESCENS.
6 ADETUS BACILLARIUS.
7 " NITENS.
8 PARYSATIS FULVIFRONS.

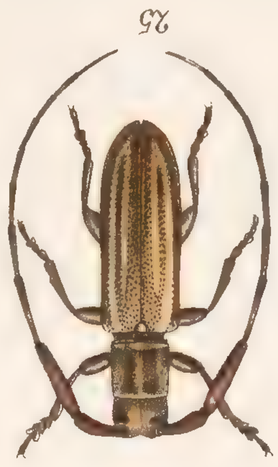
9 EUTELEUTA LATICAUDA
10 AMPHICNEIA QUINQUEVITTATA.
11 ALETRETIA PULCHRA.
12 ACESTRILLA MINIMA.
13 DESMIPHORA FARINOSA.
14 EUPOGONIUS APICICORNIS.
15 " VITTIPENNIS.
16 UNELCUS LINEATUS.
17 DILOLOPHUS VEXATOR.

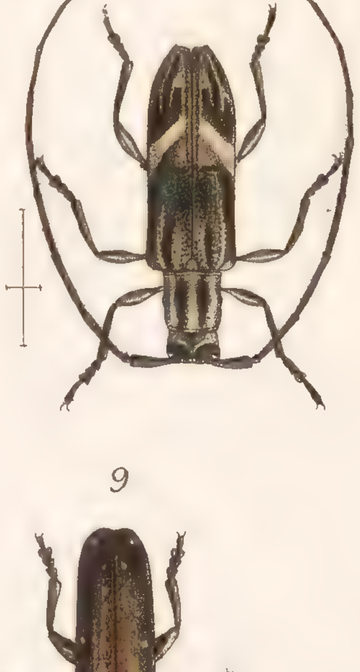
18 EUPROMERA GLABRICULA.
19 SARILLUS PYGMÆUS.
20 POGONILLUS SUBFASCIATUS
21 PENESSADA ALBOSIGNATA.
22 EURYCALLINUS MIRABILIS.
23 MYRMOLAMIA OPACICOLLIS
24 LAMIESSA EUMOLPOIDES.
25 ISCHIOLONCHA LINEATA.

W. Rufkiss lith.

Hanhart imp
401







Bal. Beetles. Plate 22.

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1 DORCASTA OBTUSA.
2 XENOFREA AREOLATA.
3♂ THRYALLIS GRANULOSUS.
4♂ CHALASTINUS CHAMPIONI.
5 STEIRASTOMA LITURATA.
6 " CŒNOSA.
7 ACANTHODERES PURULENSIS.
8 " POLYSTICTUS.
9 ACANTHODERES UMBRATUS.
10 " ARIETIS.
11 SYCHNOMERUS HIRTICORNIS.
12 " BARBIGER.
13 AMBLYSAPHES STRIATUS.
14 TETRASARUS FORMOSUS.
15 " PLATO.
16 PLAGIOSARUS MELAMPUS.
17 " MELAMPUS, V. CONGESTUS.
18 LEPTOSTYLUS ALBESCENS.
19 " DIFFUSUS.
20 " RETRORSUS.
21 " SIGNATICAUDA.
22 " FULIGINEUS.
23 " PHRISSOMINUS.
24 " ZONATUS.
25 " ALBICINCTUS.

W. Purkiss lith.

Hanhart imp.

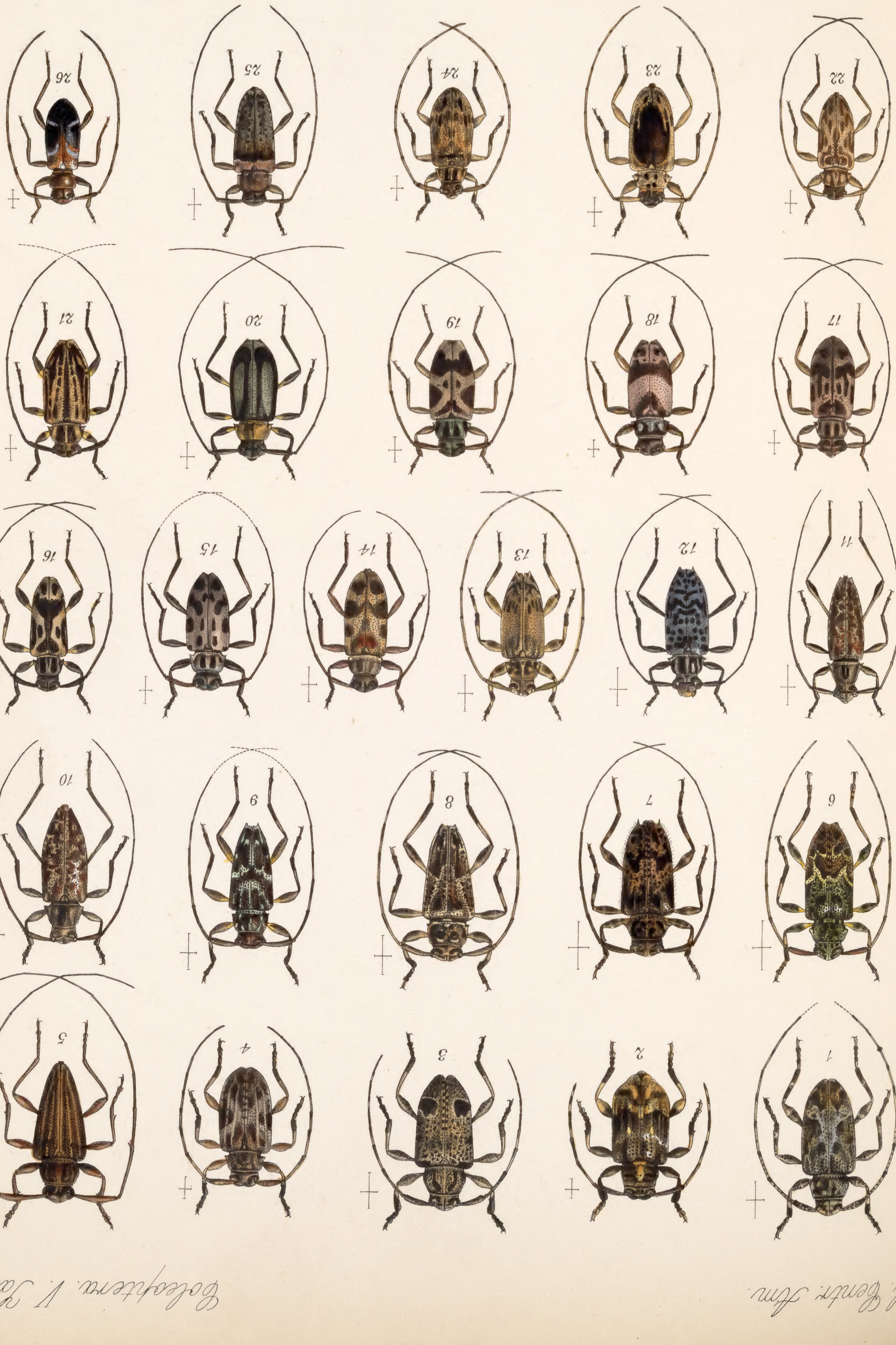
Inches 1 2 3 4 5 6 7 8
Centimeters 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
KODAK Color Control Patches © The Tiffen Company, 2000
Kodak LICENSED PRODUCT
Blue Cyan Green Yellow Red Magenta White 3/Color Black

Inches 1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Centimetres
KODAK Color Control Patches © The Tiffen Company, 2000
Kodak
LICENSED PRODUCT
Blue Cyan Green Yellow Red Magenta White 3/Color Black

1 LEPTOSTYLUS X-GRISEUM.
2 " QUINTALBUS.
3 " ASPICIENS.
4 ELEOTHINUS PYGMÆUS.
5 XENOSTYLUS SUBLINEATUS.
6 LOPHOPÆUM W-FLAVUM.
7 " SPINIPENNE.
8 OZINEUS ANGULISTIGMA.
9 OZINEUS MŒSTUS.
10 ANISOPODUS DISPAR.
11 " NIGRIPES.
12 LEPTURGES PALLIDULUS.
13 " CALLINUS.
14 " LETEGUTTATUS.
15 " ORNATISSIMUS.
16 " CHARILLUS.
17 " CALLIZONUS.
18 " CALLIZONUS.
19 LEPTURGES HISTRIONELLUS.
20 " TRIVITTATUS.
21 " PLURISTRIGOSUS.
22 " LITERATUS.
23 " NIGRIDORSIS.
24 " XANTHO.
25 " AMPLICOLLIS.
26 " RUFULUS.

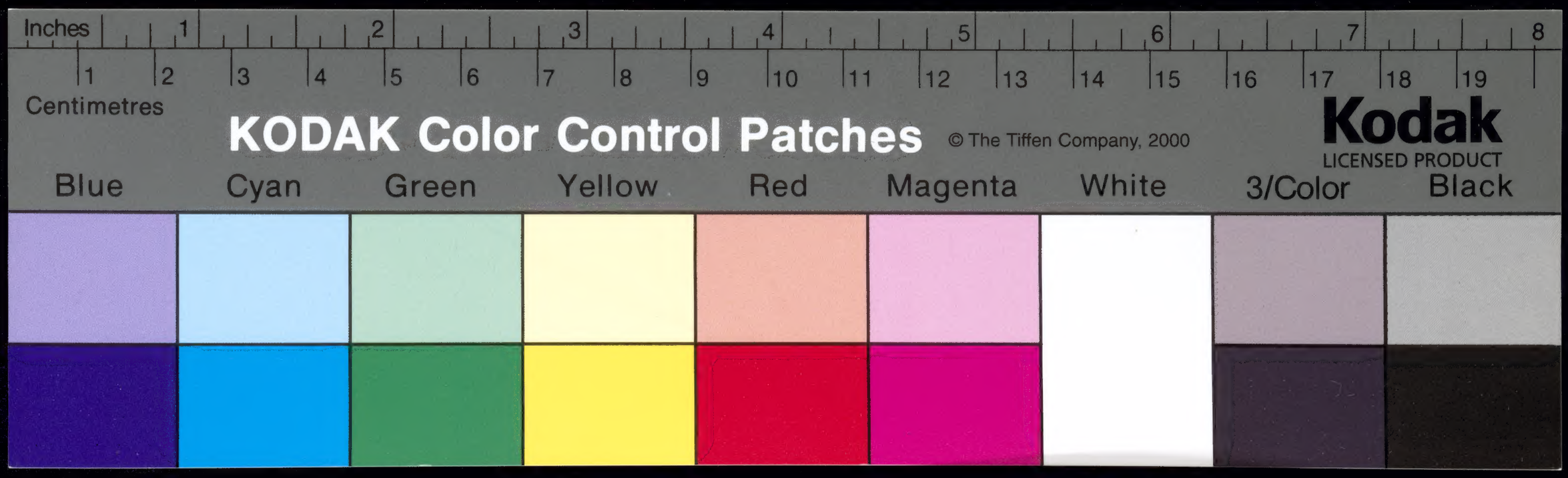
W.Purkiss lith.

Hanhart imp. 405.



Biol. Centr. Amn.

Coleoptera. V. Vol. Pl.



1 SPHENOPSILUS CLAVIGER.
2 CARPHEOLUS SUBLINEATUS.
3♀ NYSSODRYS FORIFERA.
4 " INCLUSA.
5 " 20-GUTTATA.
6 " UNIVITTIS.
7 " POLYTÆNIA.
8 " CONCINNA.

9 ASTYNOMUS EUCHARIS.
10 COLOBOTHEA ALEATA.
11 CARNEADES CHAMPIONI.
12 BACTRIOLA VITTULATA.
13 ASEMOLEA PURPURICOLLIS.
14 CALLIA ALBICORNIS.
15 ÆRENICOPSIS CHAMPIONI.
16 AMPHIONYCHA SERICIPENNIS.
17 " CHIONIDES.

18 AMPHIONYCHA BICARINATA.
19 " PULCHRICOLLIS.
20 " CINCTIVENTRIS.
21 ISOMERIDA EXPLANATA.
22 TYRINTHIA BIFORMIS.
23 " PHOTURINA.
24 LYCIDOLA ISABELLINA.
25 OXYLYMMA CERULEOCINCTA.

W.P. Hurkiss lith. Hanhart imp. 407

Biol. Centr.-Am. Coleoptera. V. Tab. 25.

1 BRUCHUS LONGIFRONS.
2 " ALBOTECTUS.
3 " GODMANI.
4 " INCENSUS.
5 " SALVINI.
6 " COLUMBINUS.
7 " ABERRANS.
8 " SUAVEOLUS.

9 BRUCHUS CYANIPENNIS.
10 " ALTICOLA, *var*.
11 " MILITARIS.
12 " LINEATICOLLIS.
13 CARYOBORUS CHIRIQUENSIS.
14 BRUCHUS BREVIPES.
15 " LONGULUS.
16♂ " CUBICIFORMIS.
17♂ " IMPIGER, *var*.

18 BRUCHUS COMPACTUS.
19♂ " LEUCOSPILUS.
20 SPERMOPHAGUS PROPINQUUS.
21 " DISPAR.
22 " DYTISCINUS.
23 " CENTRALIS.
24 " MARMORATUS.
25 " IRRORATUS.

W. Purkiss lith.
Hanhart imp.
413.

KODAK Color Control Patches © The Tiffen Company, 2000
Kodak LICENSED PRODUCT
Blue Cyan Green Yellow Red Magenta White 3/Color Black
Centimeters 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Inches 1 2 3 4 5 6 7 8